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Regional Summer Schools

for Extension Workers

*Report of a Second
National Workshop*

October 16-21, 1955

Baton Rouge, Louisiana



UNITED STATES DEPARTMENT OF AGRICULTURE

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FOREWORD

Increasing proficiency in the selection and presentation of facts and skills to farm people is essential if Extension is to discharge its expanding obligations effectively. Just as we try to keep abreast of research in subject matter, so, also, is it important to know and use the latest facts about teaching methods. Helping people to understand, consider, and adapt improved techniques is our assignment. To be consistent our own methods must reflect the improvement that we teach.

Regional summer schools occupy a special place in Extension's overall training program. These three-week sessions provide a practical opportunity for each of us to obtain a clearer perspective of our many tasks and compare our methods with those of colleagues from other States. Our best effort is needed to make these schools more useful to us all.

C. M. Ferguson
Administrator
Federal Extension Service



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REGIONAL SUMMER SCHOOLS
FOR
EXTENSION WORKERS

Report of Second National Workshop on Regional Summer Schools sponsored by a Subcommittee on Inservice Training of Extension Organization and Policy Committee, Baton Rouge, Louisiana, October 16-21, 1955.

PURPOSE OF THE WORKSHOP

L. E. HOFFMAN
Associate Director of Extension, Purdue University,
Chairman, Subcommittee

Our regional summer schools are only one phase of Extension's increasingly important inservice training program. They have proved, since their inception in 1938, to be a most important part. Study at another institution and among extension people from 20-40 other States has lifted classwork out of the familiar routine and given it the needed breadth and stimulation. Even veteran workers who profess to have "no salvage" in themselves have enjoyed their experiences at these regional schools and remodeled their attitudes and operations.

These regional schools add something special and it is most appropriate that we meet a second time to consider ways to make them more effective, to pool the experience of all those who have taken part, and to fit them more usefully into each State's series of inservice training efforts.

Under the efficient management of Miss Collings, we have here a workshop program that affords us a real opportunity to review what we did last year at Purdue, and to help each other add growth and vigor to this unique phase of our training.

POTENTIAL VALUES OF EXTENSION REGIONAL SUMMER SCHOOLS

by

C. A. Vines, Associate Director
Agricultural Extension Service
University of Arkansas

It is difficult to place a value on regional summer schools without an understanding of the problems involved in extension education. With this in mind, let's take a look at some of the situations under which we are doing educational work with farm and rural people.

Most of us will agree that our personnel, in general, is better trained in subject matter than in teaching methods. Most of us know more than we are able to teach others. Without minimizing the value of subject matter, we are seldom asked by a group of farm people to move an extension agent from a county because he does not have enough information. Most of the complaints are based upon poor public relations and techniques of teaching people.

Oftentimes our best informed employees from the standpoint of subject matter are our poorest teachers. Continued success of an extension program depends upon reaching people effectively through the use of proper teaching methods. It is a unique, informal type of education. It was with these things in mind that the Extension Committee on Organization and Policy of the Extension Directors recommended the establishment of the four regional summer schools.

The results of extension teaching are usually quite different from those of classroom teaching. Facts taught by extension call for a change in the way farm people are presently doing things. Oftentimes these people are doing things a certain way because they learned to do them that way from another generation. They, and all of us, are slow to change.

Many times our recommendations call for current expenditure of money by farm families. Where money is involved people think twice before acting. It is quite different from that of teaching mathematics or English, which comes about as a gradual process and involves no other major changes or decisions.

Extension education must also motivate others to assist. We depend upon leaders to retell our story. They are voluntary leaders who give of their talents and time without financial remuneration. In our State, voluntary leaders contribute more time in projecting an extension program than do our own paid personnel.

A survey in one of our Southern States a few years ago revealed that the number one source of information leading to adopted practices by farm people was that of neighbors. Fortunately the extension service ranked second, with feed, seed, and fertilizer dealers running a close third.

How to inspire leaders is one of the great challenges of our time in the extension services. During the seven years I spent as a district agent, one of the most interesting and fascinating experiences was that of going

from one county to another and finding great differences in the county agricultural programs. In each case there would be nothing more than an imaginary county line separating the two counties but there was a greater difference than that. In one county an extension agent possessed the leadership and skill to inspire others to help spread agricultural and homemaking facts. Good agricultural programs and good leaders go hand in hand.

Extension personnel must do their teaching under a variety of conditions. It is not difficult to imagine a county agent or a home demonstration agent conducting a meeting before an audience made up of people with doctors' degrees from some of the best institutions in the country, together with people who can neither read nor write. We are finding more and more that visual education is the best way to prevent talking over the heads of some people or talking down to others.

Another condition that extension employees have to cope with is that of the variety of subjects to be dealt with. It is amazing to spend a day in a county with an extension agent and record the number and variety of questions that are asked. They will range all the way from highly specialized questions on cotton insecticides to broad questions on such things as international affairs.

The extension personnel must also recognize the fact that acceptance of, or even being exposed to, extension teaching is voluntary on the part of the public. It is quite different from that of classroom instruction where students are in their places day after day, regardless of what is being taught. This means that facts presented must be practical and interesting enough for people to seek continued counsel and guidance from extension employees.

Another situation under which extension teaching is being done is that of the competition from a large number of other agencies, organizations, and individuals who are also attempting to influence people. It is often difficult for the farm families to correctly evaluate information. The extension agents must be conservative and make sure they have the research information from the college to support their facts. Once people lose confidence in an extension employee it is extremely difficult for him to teach effectively.

All of these situations are complicated by constant changes in agriculture, such as mechanization, population shifts, surpluses of certain commodities, and many other major problems. Under these conditions it is easy to see that the answer to extension educational problems cannot always be found in regular college or university classroom courses. It is also difficult to visualize that each State can adequately train its people for these complex problems without a great deal of duplication and waste of resources. In the final analysis our problems are similar from State to State. It was in this atmosphere that the regional schools were established.

By pooling our efforts we are able to use best the top talent in the country to provide a quality and type of training not available to individual States.

Since the regional schools are designed to serve all States, all extension directors should assist in planning what goes into the curriculum. Such an important task should not be delegated to college officials of the institution where training is being given. It is not fair to them to expect that they assume so much responsibility. Those of us in the field, living with the problem of assisting rural people from day to day should be better qualified to suggest the type of training needed for our staffs. As a matter of fact we need the help of all extension employees along with the extension directors; we need the assistance of the professional improvement committees of the county agents associations, home demonstration agents associations, specialists, and others within our organizations.

We are fortunate to have also the counsel of people in adult education represented here today and others with foundations and other organizations. These people have broad experiences from which we may draw. Workshops such as this afford an excellent opportunity to exchange ideas on our educational needs.

In discussing the merits of a regional summer school and the type of training that fits extension employees one should not overlook the value of a regional school in affording the exchange of experiences and fellowship from one State to another. This exchange of ideas may be as important as the information obtained directly from classes. Then, too, the training course is often the necessary spark that inspires an employee to further his professional improvement. Most of our States are in need of a more liberal "leave for study" arrangement to lend encouragement to this endeavor.

Perhaps one of the least developed aspects of the schools is that of more efficiently utilizing the information obtained by those in attendance at regional schools after they return to their respective positions. We recently made a survey in our State of the work being done by those attending a course in farm and home development. The results were most gratifying. It is our observation that the additional accomplishment in farm and home development in the counties where our people had attended the course has far more than paid for the expenses and time devoted by the individual and our organization.

Perhaps we need to use these people to inspire others by placing them on committees, conference programs, and by other means have them help spread the information to others. County agents and home demonstration agents are more inclined to accept information presented by one of their own group than they are from someone from their State office. Extension directors throughout the country should work closely with the regional schools to help bring about changes that are bound to occur with changing times. What is good today may not be good five years hence. Someone has said, "Under such rapidly changing conditions, we must run fast in order to stand still."

Perhaps the regional summer schools are not all that they might be, but they are a definite step in the right direction. Working together, we can inject into them other improvements as time goes on.

It may be that we need more special lectures, field trips, or actual situations under which extension agents work to teach more effectively. I realize that with the limited time of the regional schools, special activities must be limited. It might be possible, however, in the near future, to bring to the schools some of the Nation's outstanding people for lectures on some of our broad problems.

The value of a well-trained staff cannot be over-emphasized. It is poor economy to invest six to eighteen thousand dollars a year in salary and travel of a person who is not well trained and up to date on the latest teaching methods as well as information.

This recalls the story of a man who was once asked what he would do if given five minutes in which to chop down a tree. His answer was, "I would take the first two and one-half minutes to sharpen my ax." The educational problems that lie ahead today called for a sharp axe. We are inclined to become so busy and engrossed in our daily chores that we fail to see the important things in extension work, such as the matter of being well trained. The challenge that lies ahead in extension work is greater than ever before. With the exception of short courses and football games, we perhaps have more people passing through a single county extension office in the period of a year than we have visit the campus of our Land-Grant colleges. To many people the extension agents are the Land-Grant college and they know little else about the institution. From this we can see that the extension agents are important people in our institutions and it is the responsibility of all of us to see that they are as well trained as possible.

LIBERAL ADULT EDUCATION

by

R. J. Blakely, Manager, Central Regional Office,
The Fund for Adult Education

I. ITS IMPORTANCE TO AMERICA

There have been several forecasts of America's economy in the last year. One of them is Frederick Dewhurst's "America's Needs and Resources." Another is Peter Drucker's series of articles in Harper's magazine. These are optimistic forecasts. Gone is the notion that haunted us in the 1930's about the mature economy. The advance of our economy is not an arithmetic progression. It is geometric. It isn't from 2 to 4 to 6 to 8, but one part of it is like the squares of these.

I want to pause for a moment on that and take the example of the transistor. The transistor is a device something like the vacuum tube, but whereas the vacuum tube is big, delicate, and generates a lot of heat, the transistor is small, durable, and generates almost no heat. This means that you could put transistors into a box about as big as a table that in a vacuum would fill a room this size or bigger. We will be able to do many things with transistors that we cannot do with vacuum tubes, thereby contributing to progress in an upward curve. Or take the microscope. We have learned in recent years to use rays other than light rays. First the electron, getting magnification of 100 thousand diameter or so, and now the neutron microscope getting magnification of 300 to 400 thousand diameters. You will be able to find out more things that will lead to even further advancements.

There are two disturbing features in America's future. One of them is our natural resources and the other one is the quality of our people. The natural resources come down actually to the quality of our people, also. Ahead of us are possibilities - many of them almost fantastic! The use of science to get materials and minerals out of the sea; the use of chemistry to produce all the foods and other kinds of materials we need directly out of the elements; getting energy from the sun. Or, if all this is too optimistic, then it is a question of husbanding our resources well. Both prospects raise the question of the quality of our people, whether our people are skillful enough to overcome these shortages of raw materials and wise enough to use them with prudence.

Now I am not going to get into the argument about whether the American people today are superior or inferior to the American people of 50 or 100 years ago. But of one thing I am very sure, and that is, compared to the issues that we have to face, we are less competent than our ancestors were 50 or 100 years ago. The issues are greater, that which is at stake is greater, the urgency of solution is greater, and by this test the quality of the American people is inferior to what it used to be.

And even if we have an arithmetic increase in the quality of our people, we are having a geometric increase in the magnitude of the problems they must cope with.

So we come to the matter of education. The American people have always looked to education as the solution to long-range problems. But we have confused education with schooling, so that for most American adults, a high school or college diploma is a kind of ruptured duck button. It is an honorable separation from serious intellectual activities for the rest of their lives. We praise our youth, we love our youth, and we go to great pains to keep them from getting any real responsibility until they are no longer youths. It is an adult-controlled world. We are remembering what the great teachers of all times have always known--the adult is capable of learning that which the most gifted child or youth is not. He is capable of understanding the important issues of life which only experience can give him the capacity to understand. An education, really, by its very nature, must be continuous, or it is not education. It is growth. That is the essence of education. When growth stops, no matter at what point or where, when growth stops, that proves the failure of education.

Therefore, the key to our educational problems is not the education of our children. The key is not our formal education. The key is in adult education. Now adult education for what? If we look at our educational system, we see that specialized education is being pushed in both directions. It is being pushed further and further down into the trades. And, on the other hand, most adults who are engaged in what is called adult education are engaged in some kind of specialized education, rather than the education of themselves as personalities and citizens.

In "The American Scholar" Emerson wrote, "It is one of those fables which out of an unknown antiquity convey an unlooked-for wisdom that the gods in the beginning divided man into men, that he might be more helpful to himself, just as the hand was divided into fingers, the better to answer its end. That old fable covers a doctrine ever new and sublime--that there is one man present to all particular man only partially and through one faculty, and that you must take the whole society to find the whole man. Man is not a farmer, or a professor, or an engineer, yet he is all. Man is priest, scholar, statesman, teacher, and soldier. In the divided, or social state, these functions are parceled out to individuals, each of whom tries to do his stint of the joint work, while each other performs his. The fable implies that the individual, to possess himself, must sometimes return from his own labor to embrace all other labors. But unfortunately this original unit, this fountain of power has been so distributed to the multitudes, has been so minutely subdivided and peddled out, that it is spilled into drops and cannot be gathered. The state of society is one in which the members have suffered amputation from the body and spread about as so many walking monsters--a good finger, a neck, a stomach, an elbow, but never a man. Man is thus metamorphosed into a thing, into many things. The planter who is man sent out into the field to gather food is seldom cheered by any idea of the true dignity of his ministry. He sees his bushel and his cart and nothing more, and sinks into the farmer, instead of the man on the farm. The tradesman scarcely ever gives an ideal worth to his work, but is ridden by the routines of his craft and the soul is subject to dollars. The priest becomes a form, the attorney a statute book, the mechanic a machinist, and the sailor a wolf with a ship.

"In this distribution of functions, the scholar is the delegated intellect. In the right state, he is man thinking. when a victim of society, he tends to become a mere thinker, but still worse, the parrot of other men's thinking."

That, it seems to me, is a beautiful expression of the problem of what you might call liberal education. It isn't just another kind of specialized education. It is a spirit, an essence, so that all the time you are paying attention not to the farmer, but to the man farming; not to the lawyer, but to the man in law; you are paying attention to the essence of a man's personality, not his function in life. You are paying attention to the commonality that he shares with other people. You are paying attention to the nature of the society that all these men make up.

Liberal education is this--it is education for freedom, freedom for the free man. Now this can't be something that you put in opposition to practical education. You can teach almost anything liberally. You can teach farming so that you are paying attention not to the farmer, but to the man farming. So, just as adult education is the key to the problem of education, liberal adult education is the key to the problem of adult education.

I am now going to make some illustrations of developments in American society which, it seems to me, indicate that this is becoming recognized. I am going to try to spell out the logic in business, in our labor force, in unions. I am going to leave agriculture for treatment tomorrow.

I begin with corporate capitalism. The evolution of this logic is from ignorant self-interest to enlightened self-interest; from enlightened self-interest to responsibility for the whole; from that sense of responsibility to the requirements of planning, one of which is the evolution of a philosophy, an idea about the kind of thing you are planning for: "What is the good life?" This logic is taking place within the growth of concentration of power in corporate capitalism. In the United States, 135 corporations own 45% of the industrial assets of the United States. This doesn't begin to tell the story. When we take into account all the contracts that are interwrapped and the setting of the climate of industry, we see that the concentration of power is much greater than these figures indicate. So you have a very close identification of the interests of these corporations with the general interest. It isn't quite true that what is good for General Motors is good for the country, but it is undeniably true that what is good for the country is good for General Motors.

I want to talk a little bit about the development of the sense of responsibility. Let's take the matter of money for investment, for risk capital, for new inventions, for new enterprises. In three-fourths of the members of the New York Stock Exchange, the only large investors are fiduciary trusts--that means banks, insurance companies, and pension funds, the holders of other people's money. Who are these other people? These other people are to a great extent the American middle class. So the people who control these fiduciary trusts have a sense of responsibility on the one

hand, if they do their job well, to the owners of this money who are, in the bulk, the American people as a whole. And on the other hand, they have a sense of responsibility, or they should have, as the keepers of our investment capital, to make possible the development that is necessary for our future.

This means planning. We Americans tend to scorn or oppose the word "planning." What we are really opposing is state planning. We are probably the greatest planners of all time, because not to plan is to be unprepared. Not to plan is to be left at the mercy of chance. But to plan, you have to have a conception of what kind of a life is a good life. So out of this requirement you have arising the development of what you can call philosophical thinking among the managers of our big corporations. These managers, these executives, need to do various things. They need to take many different factors into account. They need to relate them. They need to have many different kinds of people with many different kinds of skills working together. They have to deal in terms of purpose and value. So we have in recent years a developing concern among many of our business men for liberal education. You see it in the efforts of some to save the private liberal arts colleges. You see it in many of the journals. Harvard Business Review, for example, has article after article, issue after issue, on the matter of what kind of an education does an executive need, and the theme is struck again and again that the executive, the modern executive, needs education in the humanities because only the humanities can give him the skills to deal with values, purposes, human relations, and the judgment required. And you see, for example, activity like the Bell Telephone Company's experiment. The Bell Company last year, and again this year, is sending 15 or 20 of its executives very near the top, paying them their salaries, and their expenses, to go for a full year to the University of Pennsylvania in Philadelphia. While there they read Plato and Joyce and Cervantes and Shakespeare. They are not going there to study problems in management. They are going there to have their minds opened up.

In Memphis, there is going on what is called a seminar for the liberal education of young executives. It is under the auspices of Southwestern at Memphis. Twenty young executives of the vice presidential level are paying \$500 each, or their companies are paying for them, to enable them to take 2 years of liberal education on their weekends, by means of seminars.

These are just illustrations of the development in corporate capitalism of concern for liberal education and an appreciation of its values. I have tried to indicate to you why this is happening. I think it is happening because of the requirements of modern capitalism, the requirement that executives be broadly educated, sensitive humanists.

Let me talk a little bit about another aspect. That is the new American labor force that is coming up. We have in our language now the word "automation." Automation is not new. It is just a quickening of something that is quite old now. It is the use of machines to do work that machines can do better than human beings can do. The other side of it is to use human beings to do that which human beings can do better than machines, or which human beings only can do. The implications of automation are not

fewer but more jobs, and very much more highly trained workers: people who have to be able to understand why they are doing what they are doing; people who have to be able to relate what they do with many other kinds of skill and abilities; people who have to make quickly rather sensitive judgments involving human beings, involving abstractions. This is the new American labor force which is shaping up.

So now I come to labor unions. Labor unions cannot but be influenced by the kinds of people who are members of the unions. And you have here, therefore, the same kind of logic from self-interest to enlightened self-interest, to responsibility, to philosophical thinking in terms of the kind of society that we consider to be good.

I want to give you an example in writing. I quote from the preamble of the present constitution of the American Federation of Labor, which was adopted in the 1880's: "A struggle is going on between the oppressors and the oppressed of all countries. A struggle between the capitalists and the labor which grows from year to year." This is pure Marx. The preamble to the constitution adopted by the A.F.L.-C.I.O. Merger Committee has none of this. It has, instead, this sentence: "At the collective bargaining table, in the community, in the exercise of the rights and responsibilities of citizenship, we shall responsibly serve the interests of all the American people."

So you have this development from self-interest, to enlightened self-interest, to a sense of social responsibility. You have new kinds of members coming up with new kinds of interests, not just the bread and butter concerns of the past, but also concern with how to live more meaningful lives, both personally and in the community.

And you have new roles which will develop. Many of our decisions concerning price and production in our basic industries are having to be made on economic grounds in terms of the best economic analysis. They can't be made by the clash and pull of industrial dispute. Now with this development, what will the unions do? Will the unions wither away because they have no function? Will the unions be obstructive? Or will the unions turn to trying to do other kinds of things for their members? This is an evolution that is taking place in some of the unions. For example, the United Steel Workers since 1946 have been having institutes and seminars with quite a number of universities over the country, as many as 25. These institutes and seminars for their members with these universities are not aimed at problems of grievance procedures and collective bargaining. They are aimed at the questions of the development of the members as individual human beings and the improvement of their citizenship. The Inter-University Labor Education Committee, whose board has 4 people from the AF of L and 4 from the CIO, and representatives of 8 universities, is now making a survey of the nonbread and butter needs that union members have in education and how nonlabor agencies, notably the universities, can help them.

Well, I have touched on business; I have touched on labor; I am going to put agriculture off until tomorrow. I want to talk now a bit about voluntary organizations and some developments in them.

First, let's pay attention to the significance of voluntary organizations. One of the differences between freedom in the modern world and freedom in the ancient world of ancient Greece and Rome is that freedom today includes freedom for organizations. There have always been certain degrees of freedom for individuals, but the idea of freedom for organizations, for collective persons is something quite new. It is something that belongs to our times.

Another significance of volunteer organizations is that as our civilization becomes more mature, more and more institutions are formed around ideas, around specific purposes. The American Republic is probably the first State that was ever organized rationally around a purpose, exposed in the preamble and the articles of the Constitution. The American governmental system is the product of voluntary associations and activities in contrast to the system in Russia, the system of Nazi Germany, in which all organizations get from the State their permission to exist. In contrast to that, the American government its very self is a product of voluntary organizations. So voluntary organizations have a meaning very close to the heart of what a free society is. Now, also, as civilization becomes more complicated and mature, we have to do consciously and deliberately more and more things that formerly we did almost instinctively, so that we have a greater heed for effective voluntary organizations. Here we have, however, one of the growing weaknesses, I am afraid, in American society. Certain studies have been made that show a surprising number of people within organizations, who really take any active part, that becomes even more startling. So that you have, maybe, as few as 7 or 8% of the only 35% of our people who belong to organizations who really take an active part.

Another weakness is that so many of these voluntary organizations organized for a specific purpose are narrow in their interpretation of that purpose and are a decisive influence in our society rather than an integrating influence. And the leadership is inadequate in numbers and skills.

We have a division in this country far more important than the division between rich and poor. This division between rich and poor we have done much to eliminate and we are doing more, but the other division is between those who have responsibility taken from them. We have a relatively few people who are overworked, who try to do too many things but don't do them well, on the one hand; on the other hand are great numbers of people who do very little, who have a sense, vague or sharp, of inadequacy, of not belonging, of not feeling important. Our voluntary organizations are our training ground for leadership.

So we have a need for a new kind of leadership--educative leadership. I want to make the analogy between production for production, and leadership to produce new leadership. Until the industrial revolution, we knew how to produce only for consumption. With the industrial revolution, we learned how to produce for production, and that is why our curves have been going up in these economic reviews and forecasts. Most of our leadership has been and still is simply to get a job done. There must be another kind of leadership that does get the job done but at the same time produces other leadership, pays attention to the educative processes of working with other people.

I want to come now to the nature of adult education. It should be professionalized, people say. And there is no doubt that it does need professionalism. It needs to have a coherent body of leaders and knowledge and skills which can be transmitted. But if it becomes professionalized, it must realize the peculiar nature of the profession of adult education. This pertains to the relationship of the professional with the volunteer. The job to be done is so vast that if professional adult educators are the only people who will teach other adults, it won't get done. The main essence of the professional adult educator should be his ability to discover, to enlist volunteer lay people to help him do the job; to give him the training.

II. LIBERAL ADULT EDUCATION--ITS SPECIFIC IMPORTANCE TO AGRICULTURE.

I left for today a rather more detailed attention to agriculture. We start with the new farmer, the kind of farmer who exists in many parts of the country; the type toward which other farmers are evolving.

In the first place, vocationally, this farmer is a good bit of many things. He is soundly educated vocationally; he is a good bit of a geneticist concerning his plants and his animals; he is a good bit of a chemist with regard to soils.

This farmer of today has to know about marketing, and the like, but economically he is at a disadvantage. He doesn't have the control over production that the industrialist does; he doesn't have the control over the setting of prices. Consequently, the new farmer is a good bit of an economist in the broader sense.

Today's farmer is also a practical student of political science. In terms of votes he finds himself more and more at a disadvantage. He finds himself in a society of great urban areas whose people don't know anything about agriculture and don't really care, except for hoping to have food at cheap prices.

This farmer needs to be somewhat of a sociologist, because he is in a society in which the old community and the old mores are largely disappearing, if they have not already disappeared. He finds he has to be a good deal of an expert, or at least he has to be very knowledgeable in terms of world affairs. He has to see the relationship between the domestic economic policy and foreign economic policy, and the relationship between foreign economic policy and foreign policy in general.

I am going to be specific here. I am going to talk about Allan Kline. I have known Allan Kline for about 20 years. I have known him as a friend and as a farmer. I used to go up to his farm every once in awhile and spend a week-end with him. He would call in some of his farmer friends, and we would get some of our mutual friends down from the University of Iowa, and we would have a big discussion. I have seen Allan develop from an active member of his county bureau to the president of the Iowa Farm Bureau Federation. He is also a member of the board of directors of the Fund for Adult Education.

Allan Kline is a figure of great power and influence, even though he is no longer president of the Farm Bureau. He is a good illustration of the kind of thing I suggested yesterday, in which our volunteer organizations are training grounds for our leaders. Allan Kline can speak with equality on agricultural economics with the economists. He can speak in terms of foreign policy; you have heard him speak with equality on foreign policy with diplomats. He is the prototype of the new farmer. I could mention many others. This is the new farmer, the kind of person that agricultural extension in its broader educational programs must call upon for help; not just in the traditional way of working with the farm youth and so on, but call upon for help in finding out how we can get to the rural areas of America the kind of educational progression in these broad and deep issues which are both personal and world wide.

To cite other pieces of evidence of the new farmer, I could point to the National Farm Institute, which has been going on every year since 1937. It is a platform for the discussion of the uses of American agriculture. Some of these are rather sharply focused, like the farmer and world trade, the farmer and the war, but in 1955 the theme of the Farm Institute was "The Farmer and the Free Society."

I could point to the work of the study discussion groups of the Ohio Farm Bureau Federation with which you are perhaps familiar. A lot of these take subjects which are of vocational concern, like marketing, but many of them take larger problems also, both in terms of the home and terms of the society. This year and next year the Iowa Farm Bureau Federation is having what is called its freedom program. It has study discussion materials prepared in cooperation with Grinnell College and Iowa State College, and in their local, district, their regional, and their State meetings they have a part of every time devoted to a discussion of these materials.

The point is that the agricultural extension program movement must, it seems to me, call upon some of these new farmers for help in doing a different kind of job.

THE INSTRUCTOR STUDIES THE LEARNER

by

Dr. Ralph W. Tyler

Director, Center for Advanced Study
in the Behavioral Sciences

I. THE JOB BEFORE US AT THIS WORKSHOP

In talking with this group about the pattern of curriculum development I am faced with the same problems that all of you have in the regional summer schools. One of them is that about half of the group here were at the Purdue Workshop last year where there was some discussion of a pattern of curriculum planning. You will find the account of this discussion in the report of the Purdue Workshop, pages 2-27, so it does not seem useful to repeat what is there and what can be easily read. The second problem arises from the fact that everyone has been thinking for different lengths of time about the problems of planning particular courses or series of courses for a curriculum so that in no sense is it something that we are all beginning with in a blank way. We have a background--we've done a good deal of thinking about it, but in different ways.

Here this week we are talking and thinking about the planning of a course or a series of courses for the regional summer schools. But the same sort of thinking is required of the extension workers within the county when they begin to plan their own programs. The value of some sort of pattern to guide thinking and planning is, I think, easy to see and was suggested by some of the discussion that went on following Director Vine's paper. The role of theory in relation to practice is partly the age-old discovery that if we are going to make sense out of what would otherwise be a lot of chaotic unorganized impressions or experiences, we have to have some kind of a theory or some kind of a large view of what it is all about in order to begin to relate the parts. So that if, for example, we are trying to think about a problem that deals with agronomy, I assume that agronomists have a kind of model to guide their thinking. We realize that the soil affects plant growth and that the soil operates both in its chemical components and its physical characteristics. We have some notion about the physical conditions of soil, and we also take into account the matter of temperature and sunlight, the problem of the type of harvesting that needs to be done, the labor demands and the consideration of price. To think of a complex problem in agronomy requires a kind of pattern of thinking to bring to mind the various factors to be considered. We don't just sit down some day and decide to grow wheat without careful examination of the facets of the problem.

The same is true in connection with any sort of an educational program. We have a commonly recognized pattern which largely grows out of what we know about the nature of education as a process involving learning. We know, for example, that people do learn, that it is possible for a person's behavior to change. I am using behavior in the broad sense to include thinking and feeling and action. People change their behavior through learning. They acquire understanding, skills, attitudes, interests, and the like. These are new patterns of behavior for them. When we begin to work systematically to help to facilitate desired changes in behavior through learning, then we refer to the process as education.

Learning always takes place to a greater or lesser extent. Everybody learns but they may learn bad habits as well as good habits. They may acquire misinformation as well as sound knowledge. They may develop attitudes that interfere with their effective growth or development, or they may develop ones that help them to meet new problems. They may develop interests that are very narrow and restrictive or they may develop broader, wider interests. An educational program is a means to facilitate desired learning.

A common pattern for thinking about an educational program has four major divisions. The first division is the one of objectives. What sort of changes in behavior are we trying to help our students acquire? What kinds of thinking, acting, and feeling do we want to help them develop? What sorts of understanding, what kinds of attitudes or interests, or what sorts of skills or habits? These are the questions that we face whenever we come to the matter of objectives.

The second division is the matter of learning experiences. This is a technical term to represent what would otherwise require a series of several different terms. These were used by Director Hoffman and Director Vines this morning--terms like teaching methods or materials. The whole collection of the things that are done by the students, the experiences he has through which he learns, are conveniently referred to by the one phrase, "learning experiences." It includes all that is involved in planning and carrying on learning. This means that we are talking about the materials that we may use with our students, about what we do in seeking to stimulate their learning, about what they do and the assignments they carry through, the kind of reading or thinking or writing or discussion or looking at audio-visual materials.

The third division of our pattern is one not always recognized but which is very essential in any kind of ongoing educational program; that is the organization of learning experiences. What takes place in a single hour, in a single day, in a single week, or even in a three weeks' summer school is only part of a much longer series of experiences that are required to bring about really great changes in people's behavior. I have heard Director Hoffman refer to having been in a summer school course of Dr. Kruse some years ago. The fact that Director Hoffman kept using these ideas over a period of years accounted for the considerable change that must have taken place in Director Hoffman's behavior in the sense of a much better understanding of what those principles mean. He had an awareness of a much wider range of kinds of situations where he could use the principles, a greater skill in the application of them and perhaps an increasingly more favorable attitude toward the use of principles as a way of solving problems rather than expecting immediate practical answers as he implied by his talk to us this morning. All of these things require a considerable time. Even this workshop, which is only one week long, has involved some attention to organization of learning during this one week. That is, an effort has been made to have Tuesday build on Monday, and Wednesday build on Tuesday, and Thursday build on Wednesday. It is also important to realize that no matter how effective this week is, it will have little value unless it is tied in with further learning experiences. From the standpoint of looking at an educational program we must recognize that the way in which the organization takes place

has a great influence on determining whether the effect of a certain number of hours devoted to learning is very great or whether it is negligible. One of the difficulties about incidental learning, the sorts of things we may pick up in a motion picture show here or an incidental conversation there, or something we read in the newspaper, is the possibility that it will be an isolated fragment. So at some point we need to look at the relationships of learning experiences within any given course or period of time and over the years ahead.

Finally, the fourth division of this structure is the one usually referred to as evaluation. Any systematic planning is usually based upon some hypotheses or more firmly established principles of how the thing can be properly done. We know that even when the principles of operation are very well established, there needs to be periodic checks to see whether something may have gone wrong and whether the product that we sought to achieve was actually being achieved. Therefore it has become standard practice in large manufacturing organizations to have what is called quality control--to take a sample of the product that is being made and put it through a systematic test. If it is an automobile, it goes out on the proving ground; if it is a ball bearing, it goes through a series of measuring and crushing activities to see about its size, its uniformity, its strength, and the like. Even more is this kind of periodic check necessary when we are working with changes in the behavior of human beings because the factors that are not under control are very large in contrast with the factors that are not under control when you're manufacturing ball bearings or automobiles. The human beings that are learning bring their own dynamics, their own interests, their own background. We try to sense these factors as accurately as we can, but we know that we are not infallible in that regard. Whereas we think that this particular material is something they can comprehend, something they can think about and use, it is quite possible that we have made mistakes in our estimates for some, if not all, of the students. There are so many factors in human learning that unless we make a continuing check to see whether we are actually accomplishing what we set out to accomplish, it is quite possible that the educational program will not have been as effective as we hoped it would be. We may find, as we appraise results, that there have been some gaps; some changes that we hoped would take place but didn't take place. Thus, an evaluation makes it possible for us both to get further understanding of how our course works and to get some ideas about how to help individual students who are having difficulty or who are not achieving what we had hoped they might achieve.

This pattern for curriculum development involving these four divisions applies to any sort of educational program. We might, for example, be looking at this from the standpoint of an extension director concerned about the growth and development of particular staff members and would then be thinking of the total objectives for the inservice program, some of which could be met by summer school, some of which could be met by inservice induction into the State program, some of which could be met by supervisory activities, including individual help and guidance, and some of which could be met by full time study on leave for a year, or a semester, or a quarter. Or we might use such a pattern of thinking and planning for our own educational program for our own development. In this case we would want to consider the goals we needed to achieve, the kinds of learning experiences we might

arrange for ourselves, the sequential organization of learning we must work out, and the ways we could use to check from time to time to see whether we were gaining what we had hoped to gain by it. This same structure of thinking and planning is useful in developing a whole curriculum or any individual course.

II. SETTING OBJECTIVES AS A PART OF CURRICULUM PLANNING

Since planning a curriculum or a course usually begins with the choice of objectives which are to be the goals of learning for the course or curriculum, let us examine this step of deciding on objectives. Essentially, there are two phases to this job. The first is to get a variety of good suggestions for objectives and then from these suggestions select the important ones that are attainable under the conditions.

Where does one get a variety of good suggestions for objectives for courses for extension workers? The first source to which one can turn is a study of the job of the extension worker. What kinds of duties is he called upon to do? What sorts of activities does he perform? In what way does he work? The fact that he does a good deal of his work with the aid of volunteer workers who become "teachers" in the extension program suggests objectives for the prospective extension worker. Mr. Blakely's talk brought out the fact that the extension job is increasingly demanding a variety of subjects that may not have been common in the extension program 25 years ago, such as public policy issues. It also suggests objectives to be developed by the prospective extension worker.

Of course, it is clear that information about the job of the extension worker does not directly give us objectives. Rather, as you gain information about the job of the extension worker, with whom he works, what he does and how he does it, you keep seeking to answer the question. What does this suggest about what an extension worker could learn that would help him do this job better? Are there things he needs to understand? Are there certain skills he needs to develop? Are there certain attitudes he needs to acquire? Are there other kinds of behavior he could learn which would help him?

Another kind of data often helpful in looking at the job itself are the critical problems of the extension worker. This helps to identify some of the particular things that he is likely to have difficulty with unless he learns things which will help him with these difficulties. What are the critical problems of the county extension worker?

It was suggested yesterday that some of these problems were in the field of human relations or how to work effectively with people. If this were true, we could then ask: What can a prospective extension worker learn that would help him to meet those problems effectively; what concepts or generalizations does he need to understand; what skills or abilities translated in terms of things that are capable of being learned; what appropriate attitudes would help; what interests?

A third kind of data about the job which is often useful is information about the trends ahead. Because we are not preparing extension workers to do just what is being done this year or last year, we are assuming that ahead there are developments that we will have to deal with. If you find the trends ahead represent a shifting emphasis, this too may suggest emphasis for objectives, things to be developed in harmony with the trends ahead.

Another possibility is that one comes to the conclusion that conditions change so rapidly you cannot predict precisely what those changes will be, which, in terms of objectives, means a greater emphasis on teaching the professional person how to meet new problems as they arise, the sources to which he can turn for material which may not now be needed, or may not now be available, the kinds of attitudes which are required to accept new ideas, and particularly to accept a professional role in a changing set of conditions in which he does not get his security simply from being able to do day after day what he did last year.

These three ways of looking at the job of the extension worker will suggest some important objectives.

The second source of suggestions are the students themselves. Their backgrounds, their previous knowledge, their skills and attitudes all suggest objectives. Some of the more particular facts about a particular class you won't know until you meet the class, but you do know something about your prospective students. You know, for example, that most of them have not had much background in psychology or in teaching methods, or in some of the social science material with which some of your courses deal. Such facts about students suggest that certain concepts, certain generalizations, certain skills, certain attitudes, and the like, will need to be developed. They will become objectives of the course because they are needed and they haven't previously been developed.

In some cases data about the students do not give new areas of objectives but do indicate at what level to point up the goals, and where to begin.

The third source for getting suggestions about objectives are the so-called experts--persons who have been studying relevant material carefully. The chief problem in using this source is to identify those who are the experts that are worth examining. For example, in the case of the course in farm and home development, I would suppose that when we are talking about experts we are talking both about persons who have been working in the field of farm and home development as such in those States or areas where some of the pioneer work has been done and their suggestions about what things needed to be taught to county extension agents in order for them to carry on such a program effectively, and we are also talking about the experts in the content areas involved--in the relevant areas of farm management, in home economics, and so on, whatever those areas may be. Their notions about what kind of competence is required to do this job effectively are useful to consider.

Having obtained a variety of suggestions about objectives from studying the job and the students, and from experts, we need to select from them those that are most important. At this point, our philosophy of education is

helpful. What are we likely to get from the consideration of our philosophy? A possible illustration is the philosophic question whether the extension worker has to know everything intimately that has to be taught, or whether the extension worker is more nearly the teacher of other teachers. If the latter view is part of the philosophy of extension education, this would mean that the objectives selected would not attempt to try to make the extension worker build up background in all the fields that were going to be taught, but instead the objectives emphasized would be those involved in trying to identify competent help; knowing how to utilize specialists from various fields, and objectives involved in learning how to train and work effectively with competent local leaders. Objectives of this sort would be selected from the total list. Another way in which the extension philosophy would help in selecting objectives is in the decision as to whether the extension worker is primarily to be taught answers to his problems. Do we want to teach him, for example, specific techniques of group work or is the extension worker viewed as one who learns about the principles behind group work and is able to develop his own techniques. If you view the extension worker as one who learns how to solve problems, becomes familiar with sources, knows something about the general types of materials available and the techniques that are used, then the objectives are of this sort in contrast to the philosophy that holds that the job of the extension worker is to acquire answers each time new things come up.

Another kind of question raised yesterday which is essentially a philosophic one is the identification of what, in the total plan for development of personnel in extension service, is viewed as the responsibility of (a) short courses in the summer; (b) the induction in local programs that are carried on there; (c) the leaves of absence for longer term study, leaves of absence for a quarter, semester, a year, or more; (d) other kinds of supervisory problems. Looking at the total range of resources that are used in the plans developed for the education of extension workers, what is the particular responsibility of the three weeks' summer course?

Usually the rationale for the allocation of these different responsibilities lies in such factors as, where are they best learned and which has the proper facilities. I would say that anything that requires the development of skill over time is better learned on the job under effective supervisors, or else in some other kind of long-term program. These things that involve, on the other hand, getting some new philosophy, seeing more clearly the total principles involved, which would require some reflection and thought and some chance to talk those things over at some length, are likely to be done in courses like the three week courses. You can see how the decision on such a question influences the selection of objectives for summer courses.

After checking with our philosophy to select important objectives, we turn to what we know about the psychology of learning to be sure we are choosing attainable objectives. As we look at each objective, we ask whether this can probably be developed in a three weeks' summer course, or is this more properly an objective for a longer term period?

Skills are not likely to be developed to any great degree in three weeks. In this length of time some kinds of attitudes can be developed, especially

if they are not attitudes that are deeply ingrained. Students can develop understanding in terms of a limited number of basic concepts, but they cannot be expected to remember a large number of specific facts in so short a time. If certain quite specific facts seem large and important as objectives, then they will have to be restricted in number--the number that can be developed and understood and remembered over a three weeks' time. These are illustrations of the way in which we use what we know about the psychology of learning in selecting objectives that are attainable.

So much for the problem of selecting objectives. The next problem is that of stating objectives so they really serve two major purposes. One is, they should guide in the further decisions about materials, about learning experiences, about the things students may do, and the things teachers may do. And, second, they should give us a pretty clear guide as to what we need to evaluate. What it is we want to appraise in seeing whether these courses are working or not. Now, to provide that kind of clear formulation, I would suggest that there are two aspects of every objective that need to be clearly understood. One of them is behavioral aspect, and the other is the content aspect.

Remember that education is a process that enables learners to acquire new patterns of reaction, new ways of thinking, feeling, or acting. This clearly implies that there is a kind of behavior, a way of thinking, feeling, or acting represented by any objective. In most of my illustrations I have been expressing objectives in terms of a kind of behavior, such as understanding, skills, attitudes, and the like. I have emphasized behavior because many people talk only about the content side of an objective, not what the student is to do with the content. Thus one may say, I am going to teach a course in farm and home development with the following content: and he lists a whole series of content headings, often forgetting that the student doesn't carry away with him content except as he carries away some paper, and he could have done that without being present. What he carries away from an educational experience is something new in his thinking, feeling or acting. That is why we use the term "behavior." Understanding becomes a kind of reaction. You are thinking about it. You can explain something. You can point out illustrations. You keep using this concept as a key to thinking about things.

When I talk about an attitude, that, too, is a way of feeling. It is a feeling and a perception. I look at things differently. Before I used to look with disfavor and with alarm at the notion of bringing the subject of international relations into my extension work because (a) it is controversial; we don't want to get mixed up in controversy, and (b) it isn't farming, anyway. And now I have a different attitude. I look at it differently. I may not know any more about it. I still need to understand more about international relations, but at least I look at it not as a foreign thing to be repelled, but as a possible thing that would help to improve the living of the rural people with whom I work, so I have a different attitude. This, too, is behavior.

But there is also the content aspect of every objective because this behavior is not carried on in a vacuum. You don't understand unless you understand something, some content. There is always a content as well as

behavior. Both are important to clarify the objective. The same is true with an attitude. Again, it is not just attitude in general. It is not a vacuous sort of smile that is kept on the face all the time without knowing what one is happy about. We are talking about attitudes toward some things. The content part as well as the behavioral part needs to be clearly understood. Being clear about both those two aspects of every objective makes such an objective useful for the few purposes intended--the planning of the course in more detail and the evaluation of it.

The nature of the behavior helps to indicate the kind of learning experiences that will easily be provided because to put it quite baldly--a little more baldly than is quite accurate--persons learn, acquire the behavior that they have a chance to practice. If we are to teach persons so that they will understand a concept, then the learning experiences need to be such that they will be going through, day by day, during the time of the course, this thing we call understanding. If I define understanding, as I did yesterday, which is a definition that may not be wholly acceptable to you but indicates that understanding is more than rote memorization; if I define understanding as being able to state the idea in my own words, being able to pick out illustrations of it, being able to compare and contrast this idea, this concept, with different but related concepts; then the students must have a chance to do this sort of thing. And this suggests to me that I must have learning experiences like that in my course.

I also need to be clear about the content of each objective because it is the content of the objective which indicates the content which must be dealt with in the course. If students are to understand important concepts in farm and home development, for example, we must know what these concepts are and use them in the course.

Furthermore, when we seek to appraise the effectiveness of our courses we need to know what the behavioral aspect and what the content aspect of each objective mean so that we can seek evidence of the extent to which the students have actually developed this behavior, this understanding, this skill, this attitude.

I think it can be shown that, if you can get your objectives formulated so that you can yourself see clearly what you mean by the behavioral aspect of each objective and what the content aspect of each objective is, you have a clear statement of objectives that is not window dressing, but really is a basis for beginning to plan the instruction and plan the evaluation.

III. LEARNING EXPERIENCES THAT SHOULD HELP STUDENTS REACH THE TYPES OF OBJECTIVES CHOSEN

We have discussed the setting up of objectives that were clearly enough defined in terms of the behavior involved and the content to be dealt with that this definition would be of use in going on with further planning. Obviously the next stage in planning a course is to work out what will be done to attain these objectives. There are, of course, two sides of that coin. I am considering one of them, the point of view of the learner--what does the learner do, and what sort of experiences does he have, while Mr. Houle, who will follow, is dealing with the same problem of the way of

attaining objectives by looking primarily at the teacher and what the teacher does.

Of course, basically, learning is what goes on with the student. The teacher can only set up the conditions which make it possible for the student to learn. He does not learn for the student. Hence, it is useful to look first at the process that is going on with the student, recognizing that in a very real sense you cannot force him to learn; that learning arises from the reactions of the student himself, his dynamics, his energy, and the activity that he carries on, and that the teacher's role is setting up the situation, providing the stimulation, and so on, to stimulate this.

Looking at learning from this point of view, I should like to mention some seven conditions that are requisites to any sort of learning. Then I should like to try to illustrate the use of these in connection with some of the particular kinds of learning that are implied by the objectives that have been presented this morning, or others that appear in reports of the committees last year.

The first of these conditions is motivation. The learner has to have some kind of motive, some kind of drive for activity. He needs to concentrate his attention on the activities that are appropriate for the learning that is sought. Since most of the students you are working with have strong motivation to become good extension workers, the task of motivating them in your courses is usually the problem of helping students to see that what is being developed in these courses are things that are relevant to doing a good extension job.

The second condition is for the learner to recognize the inadequacy of his present behavior. He may recognize it consciously or in many cases it may be implicit and not consciously recognized, but it is essential to learning. A human being is always reacting. Normally his reaction goes on and on in patterns that he has previously developed. He does what he already knows how to do. In order to acquire new ways of thinking, or feeling, or acting, it is necessary to have some kind of difficulty, some kind of recognition of the inadequacy of what he is now doing, or the way he is now thinking about it; the way he is now feeling about it. This has been most commonly emphasized in the teaching of problem-solving by saying that a person needs to sense a problem before he can expect to attack it and try to find solutions.

A third condition requisite to effective learning is some kind of guidance of the learner's reactions so that he can acquire the desired pattern of behavior. Here, for example, is a student who wants to do a better job in extension. He wants to learn new approaches. He has strong motivation and he recognizes that his present knowledge or procedure is inadequate. As he seeks to acquire knowledge, or skills, or attitudes he needs guidance of his efforts. He can be given guidance in a variety of ways. The summary of the Purdue Workshop devotes a page or so to pointing out the different ways that we guide people's behavior in learning. Intellectual behavior is commonly guided by such things as demonstrating. We point out how it

could be done. We may guide it by a series of questions, each one focused in such a way as to cause the student to look at factors he wouldn't have thought about before. It may be guided by a carefully graded series of problems, each one adding a new facet which focuses the student's attention on one factor after another, and so on. Unless the desired behavior is so obvious that the student can guide himself, it is necessary to have some kind of guidance.

A fourth condition is providing situations or materials on which the learner can practice the desired reaction. The provision of something on which students can practice may mean developing a series of problems, or collecting case studies, or having the students find the material around from which they can do the sort of thinking, use the sort of principles you are trying to develop, or find other situations for practice.

A fifth condition for learning is to get satisfaction from the desired behavior. For example, a student in a course in group methods may begin with strong motivation, he wants to be a better extension worker. He may recognize that he doesn't understand some of the things about groups that would help him in leading groups. Next, he may be guided through questions, through lectures, or discussions, or other means to get a better understanding of groups. For this learning to become more or less permanent, it should give him satisfaction. This might come from his realization that this knowledge he is getting does help him in group leadership. This would illustrate a type of satisfaction which the learner should obtain for learning to be effective.

A sixth condition is extended practice that provides opportunity for sequential development, not practice which is just drill. There is a good deal of evidence to show that mere routine practice results in the learner giving it little attention and no improvement in learning takes place.

An important condition for effective learning is for the student to have a chance to carry on the behavior at an increasingly more adequate level. Now, more adequate will vary. In some cases we mean by that he becomes more skillful, he can do it more rapidly, with less fumbling. In some cases it may mean he can handle more complex reactions, but the general principle is that the learner must have opportunity continually to be challenged; mere easy repetition is not adequate.

The seventh condition is for the student to be able to assess the adequacy of his behavior. We can see this quite obviously when we look at the acquisition of physical skills. If I am trying to dance, and I can't have any sense of whether my steps are moving in the rhythm, then I can keep on practicing with no improvement. I need some kind of assessment of how I am getting on, some way of telling whether I am making improvement and where I am having difficulty, if my learning is to continue.

I have mentioned these seven conditions. No doubt each of you could elaborate others, or you could reduce these by classifying them under larger headings, but these indicate something of what is requisite for learning on the part of the students in your classes.

Now let me elaborate these conditions a little further in connection with some of the kinds of objectives presented earlier. The type of objectives appearing most frequently in your reports has to do with understanding or acquiring knowledge. We have been defining understanding in a way that means to have some sort of active reaction to an idea, to a notion, to a concept, to a generalization, such as the ability to formulate it in his own words, the ability to point out illustrations, to recognize illustrations, to compare and contrast related ideas, terms, or concepts. This is the kind of behavior that we are hoping to develop in the student. In most cases we can assume that he is well motivated, that he wants to acquire this sort of behavior. He may need to be helped to recognize that his present understandings are not adequate. He will usually need guidance to acquire the desired understanding. Guidance of his reactions in this case becomes largely one of trying to help him to formulate the concept, recognize illustrations, bring in illustrations, and make necessary comparisons to clarify what it means and what it doesn't mean. This guidance might include presenting the concept in reading or in a lecture, asking the student then to formulate the concept in his own words, or we might introduce the concept by having it as part of a problem-solving process. We start out by setting up problems in which he has to use these concepts so that in the effort to solve the problem the desired understanding will be brought out. This would also help him to recognize the illustration because the problem becomes an illustration with which he has to deal. In some cases he will discover that he needs certain facts, certain generalizations, that he didn't have before, and he may be in that sense stimulated to go and make a search either through written materials or by asking people, or reflecting upon past experiences that he has had. These are common ways by which teachers provide opportunities for the student to make the desired reactions. The teacher usually gives guidance in cases of this sort through criticizing the student's efforts to apply concept in the problems, or by having an example of this kind of problem done by the class with the instructor there so that he can demonstrate as the class moves along how these concepts can be used in problem-solving.

The satisfactions a university student gets from the desired behavior of this sort usually come from recognizing that he has solved some problems. Of course, other satisfactions are also possible. Being complimented by the teacher on his work, feeling that other members of the class are impressed by what he has done, feeling that he has done his duty in working these problems are illustrations of satisfactions students often report.

If we were going on with this development of understanding, part of our problem is trying to provide further practice that would lead the student into deeper or more complex understanding. We might do this in at least two ways. We might grade cases or problems from simple ones taken up first to increasingly more difficult ones for later attack. A second possibility is to have all problems fairly complex, but to accept from the student, in his initial efforts, simple notions and less complete solutions, but as he proceeds with his work, requiring more complete solutions, more adequate treatment. Whether we provide a series of problems graded in difficulty or demand more and more complete and complex solutions from the learner, we need to provide practice which continually challenges him and doesn't become routine. And finally, the student obtains a periodic assessment of the

adequacy of his behavior either by helping him to check himself as to whether he is getting adequate understanding, or by the teacher periodically assessing the student's progress and reporting to the student.

This example of teaching understanding through attacking problems illustrates another important factor in the planning of learning experiences, namely, where possible use the same experiences to attain more than one objective. One can teach problem-solving procedures in a series like this and, at the same time, the student is acquiring understanding of certain concepts. Often, too, these same situations contribute to the development of certain desired attitudes, such as objectivity.

It is not always possible to attain all of the objectives in the same experiences. It is not easy in some cases to attain several objectives from the same experiences, but we seek to do so whenever we can so as to make more efficient use of our limited time. Furthermore, this planning of learning and teaching is not a mechanical task like machine analysis in which we put our punched cards and the answers come out. Teaching, or the guiding of learning is an artistic process--that is, a chance to use ingenuity and ideas. All that we can provide of a scientific sort are the principles, the conditions that need to be met, and this, too, is like any other artistic process. If one is a sculptor he cannot be effective in his outcome without considering, in that creative artistry of his, what are the factors that will condition the effectiveness of the product that he produces.

And in the same way, there are many different possible learning experiences that could be used to attain the same objective. We could be used to attain the same objective. We could have many different sorts of case studies of problems, of demonstrations, of lectures, of films, and so on. Insofar as they meet the required conditions for learning, they may all be effective. This gives the teacher great latitude for ingenuity. If we are, therefore, planning learning experiences that might be useful to us in the future, or useful to other people besides ourselves, what I have found to be most effective is sketching out a number of possibilities, realizing that each teacher will want to use his ingenuity in adapting those suggested.

The suggestions should also include some of the kinds of ways of guiding the student's reactions, such as a listing of reading material which teachers will find very helpful in guiding the student's thinking, or some possible types of lectures, or a list of some movies or recordings that will stimulate discussion which would help to bring out the points. These suggestions may help to remind us that it is not enough to get an outline of content, but that learning itself requires the student to react toward the content in the way that has been implied by the particular objective that is set up. This is true whatever the kind of objective we are considering.

All I want to suggest here is that planning learning experiences will not give us an automatic, mechanical way of planning out a course. It gives a set of criteria like these seven, which we can use in checking the probable effectiveness of various teaching situations that we may devise or hear about. For example, we have just heard a recording on "The Family." Take, for example, after listening to this recording, if I were teaching a course "on

the family" I might say, "This recording should be useful in stimulating discussion." Then I look back at my objectives and think to myself, "Well, now, this indicates primarily the factors of a family that are viewed anthropologically." But there is the social-psychological factor of the family. What is the function of a family in social-psychological terms in providing a place for the bringing up of children? As I look at that, I begin to think about what that recording would do and what it wouldn't do. What points it might help me bring out; what points it wouldn't help me bring out. What I would need to do in order to provide concepts that are not brought out in this. What readings I would want to have, and what discussion I would want to carry on. So that I find a set of conditions like these seven useful in planning both to stimulate ideas about things I will need to do, steps I want to follow, and then, as I find materials or ideas, either from others or things that I think of, I check them back against these criteria to see where they are adequate and where they are not. I ask, "What's left out of here. Can I be sure that these will provide the conditions that are necessary for effective learning?" And in that way, it seems to me, I have been able to plan a more promising series of experiences than would otherwise be possible.

Let me turn now to the problem of the organization of learning experiences. The problem of organization arises from two considerations. One is that we seek in most learning a high level of performance; that is a complex set of things to be acquired by students. There is a great deal of learning of a very simple sort that doesn't require organization, but when you are trying to develop a professional person, an extension worker, to become more competent to carry on his job and become more competent as a broad and well-integrated person, the kinds of learning are not things that can be acquired in a brief session.

Immediately, then, we get the question of how can we bring about these great shifts, very different attitudes, quite new skills, much broader and deeper understandings that bring in whole new notions that were never in the mind of the person before, and the answer is, only through some kind of organized experience, for only time will bring about this change. It won't happen in a single day or a single exposure.

The other way we have come to looking at organization is through the discovery from studies of learning regarding distribution of practice. They suggest how much more efficient a given number of hours of learning can be if they are well organized. That is, if the distribution of these experiences is well worked out, in contrast to miscellaneous uses of the same amount of time.

The problems of organization are commonly treated in terms of sequence and integration. Sequence refers to the arrangement over time so that the learning experiences this week build on last week, those of this month on last month. Interpretation refers to the relation of learning experiences in different courses which the student is taking at the same time.

Not only does the sequential development of learning increase its efficiency, but it has been shown that seeing connections with what one is getting in one

field and what ideas he may be getting in other fields also increases the effectiveness of learning. And this relationship from one field to another, this integration of learning, does not necessarily mean that the ideas in one field have to be the same as in others. It increases understanding to see the respects in which what one learns in one field is the same as that in another field and the respects in which it is different. For example, in one of the studies in this field, the effort to get understanding of the meaning of this important concept of evolution is developed not only by having further sequential experience with evolution in biological courses, but also seeing the respects in which biological evolution is like social evolution and the respects in which it is different.

In planning the organization of learning experiences, it is helpful to look for the ways in which some important concepts or generalizations can be related from one course to another. The purpose is not to have the student repeating the same thing in two or three courses that he may have taken at the same time, or in sequence, but to have certain common concepts that are equally useful in understanding or in other ways in dealing with the two or three fields. If those concepts do occur in different courses, and if an effort is made when they are used in another course to indicate the respects in which they are alike or similar, so that he sees further implications in them, the organization of the program will be improved.

Another thing to look for in organization besides concepts and generalizations is similarities in the skills or abilities and in attitudes that we are dealing with. If, for example, in this course on the farm and home development, there is developed a way of attacking decision-making, then isn't that a kind of ability that may be used in other courses? We should look throughout all our courses to find common abilities that may be of importance, not minor ones, but important ones--common attitudes as well as concepts and generalizations. These can all become elements to emphasize both in sequence and in relating one course to another.

The ideal way to plan an effective organization would be for the several teachers responsible for extension courses to work on the problem together. However, I do not know whether this is practicable. I can assure you that a careful effort to identify concepts, skills, and values to be emphasized in the several courses in a sequential and integrated way will result in increased learning.

IV. EVALUATION AS A PART OF CURRICULUM PLANNING

You will note that the topic "Evaluation as a Part of Curriculum Planning" is almost identical with the topic that I discussed at the Purdue Workshop last year. I think there is no need to repeat the points that were developed there. They appear on pages 34-37 of the report. This report deals with four major points. One--why evaluate? What is the need for any systematic effort of evaluation? Two--what is required to appraise an educational program or course? In other words, what is involved in making an evaluation? Three--what are the chief procedures which need to be followed in making the evaluation? And four--what is the role of evaluation in a comprehensive cycle of curriculum planning and the execution of the curriculum planned? Since I don't need to repeat these points, I should like to comment on some of the difficulties raised in conversation with members of the group.

The first one, I believe, is a matter of confusion of terms which has arisen because of the several ways in which evaluation has been discussed in our conference here. In the first place, we have talked about evaluation as a topic in several of the courses, ranging all the way from the content of the course in evaluation, where this was the subject of the whole course, to a topic in a single course as in the course on program development.

The second way in which evaluation appears in the work we have been doing here is a procedure for arriving at grades for students. Students in the courses in most of the universities, if not all of them, are to be given some kind of grades, so a number of these outlines have in them a brief section on ways of arriving at grade statistics. The third use of evaluation is the process for determining the effectiveness of the course or a series of courses. Now, insofar as all of these involve the appraisal of educational results, they do involve the same general notions, the idea of beginning with objectives, and the problem becoming one of finding out how far objectives have been attained, but insofar as they represent different uses to which appraisal is to be put, they do, of course, mean somewhat different things, although there may be overlapping. Some of the information needed for deciding on a fair grade for students will probably be information that will be helpful in indicating how far the objective has been attained and thus, how effective the course has been. But there are other factors that enter into grading, and certainly there are some kinds of things like indication of attitudes or of continuing interest which are needed in appraising the effectiveness of the course that one would not care to use as a basis for grading students for fear that this would become an incentive for students to simulate an interest or an attitude in order to get a better grade.

A second problem results from the fact that the term "evaluation" is sometimes used to refer to judgments made regarding the probable effectiveness of a course before teaching it, and more usually it is used to refer to the appraisal of the results obtained after there has been some teaching, so that there are some results to appraise. Now it is clear in any systematic planning that we do on any job we carry on, that anything we can do in advance that will more nearly assure that the plan will be effective is the proper thing to do, and we do often appraise plans.

In fact, much of the outline that I was seeking to develop previously, the kind of the framework to think about the planning of a course or series of courses, is an outline that implies in it a continuing appraisal. For example, in connection with deciding on objectives, before we make a final selection we ask such questions as, "Are these important objectives?" "Are they attainable objectives?" "Have we overlooked any important ones?" These kind of questions represent an evaluation. We decide, on the basis of these considerations, that these are the objectives that we ought to try to attain in this course. Then, in connection with our objectives, we ask questions about the clarity of our definitions of them. Do we have a clear enough definition of our objectives to use them? This is another case of a preliminary evaluation. The effort to examine learning experiences as we think of possibilities; to see the extent to which they are likely to be effective, using, perhaps, the list that I suggested of seven necessary conditions for learning, or some other list that you find more helpful for

your purposes--this is certainly making evaluative judgments. You are trying to judge in advance the value of those learning experiences that you hope to use in the course. But, as the term is being used here, generally when we see it indicated in these outlines, it is referring to the appraisal that can only be made when there are some results to be appraised. That is, this is the test of the pudding in the eating rather than the preliminary test of the pudding as to whether the recipe was followed satisfactorily or whether one used principles that he knows regarding the preparation, and the like. It is useful to remember that actually we will be making evaluative judgments all the way along, but right now we are focusing our attention upon efforts to learn as much as we can about the adequacy of the course, its effectiveness, or where it fell short of our hope, by examining the results obtained by it.

A third difficulty which has been suggested here has been that of getting an appraisal of the extent to which all of the important objectives that are seriously being sought are being attained. The point is commonly made that it is not very difficult to get evidence about the student's understanding, but that objectives that may be of equal importance are not so easily appraised and the question remains as to whether it is a counsel of perfection to urge that we seek to get some appraisal of the extent to which all important objectives have been attained. It may seem very difficult to try to find out the extent to which the students are developing such things as ability to analyze problems, the ability to apply the principles to the kind of situations that they encounter in their work; the ability to select procedures or teaching techniques or other things in the light and terms of these principles; the ability to judge the appropriateness of solutions proposed for problems; appreciation of various things; interest in continuing education, and the like.

I would remind you that if you look carefully at the definition of these objectives, if you think through what it is that you are trying to get, then it becomes possible to obtain evidence about all of the objectives, the differences among them will be in the refinement or accuracy of the evidence. These are behaviors of people, although many, if not most, of these behaviors are largely mental so that they are not immediately observable. However, what one is thinking about, how he thinks about a problem, for example, is certainly shown in the way he attacks problems that are used in the course for learning experiences. If there are special term papers or problems to be worked on individually, these can provide bases for appraising the extent to which the student has used the proper approach, has really made an analysis; has applied the appropriate principles; has seen the implications of these principles. They are not behaviors that are completely beyond any observation if situations are provided for them to be shown.

You will recall that the basic notion of any measurement of human behavior is that we look at those situations where the kind of behavior will normally be shown to determine the presence or absence of the desired behavior. This may be a relatively crude appraisal but it is better than none and can be refined. This becomes a problem of seeing clearly what the objective is, then asking yourself, "Well, now, what are the situations where students could have a chance to show this?" The conditions where they show ability to solve problems are obviously those where they are confronting

problems. These may be problems that arise in their work, if we are talking about on the job, or the problems that we set for them as teachers in our classes. The way they attack them, and what they do, give us evidence upon which we can make judgments about the extent to which this kind of ability is being developed. Similarly, the attitudes of people towards things are most commonly shown when they are not trying to make a front for someone else, but when they are trying sincerely to talk about how they feel. In the informal conversations one has with students, if the pressure of a three weeks' course permits informal conversation, I am sure that there are many opportunities to see how students feel about issues, how they look at this job, what they think is important and what is not important. Attitudes are also often revealed in the class. They are certainly revealed when one tries consciously in interviews to talk about what they are doing; why they do it; what they plan to do and why; because again and again their feelings come out in the way they talk about things they consider important.

The fourth difficulty mentioned here grows out of the requirements that we recognize that students do not come into courses at any zero point in most of the things that we are trying to teach; that they already have some knowledge or some ideas; they already have some concepts; they already understand some things; they already have certain attitudes or appreciations or certain dispositions. If we do not know where they are at the beginning, we cannot assume that all the development that is shown at the end of the course was the result of instruction. Certainly in a three weeks' course there is a problem in getting evidence at the beginning and at the end and a further problem that the amount of change which can be expected in three weeks is, of course, less than if it were a longer period, so that it may be difficult to appraise even if you have some baseline evidence, but this problem can be attacked.

It is possible in some cases to get baseline evidence. I have been in workshops, for example, where we were able to make some preliminary contacts before the people came to the workshop, asking them to turn in some sample plans of things they were doing and giving us other information that gave us evidence for certain points at least. I do not know whether this procedure is possible for a three-week course, but this is only one of several possibilities of getting some information in advance about the students you are teaching. Another possibility is that the extension staff in the State from which they come will have certain information about students that will be helpful in this regard. At least one may get baseline evidence about a sample of students. If I were to have 30 in my group and had evidence on a random sample of 10, this would be the beginning of getting some basis for seeing how far a change, if any, has taken place. There is also the possibility of getting some information in the first few days of the course that will provide baseline data and some of you, I know, do that. For example, the group working on the principles of teaching to be used in agricultural extension suggested beginning the class by asking each person to report his concept of what the role of a teacher was and then comparing it with later assignments.

Another possible way of getting evidence of change is by the method illustrated by Director Vines the other day, and this is being done. You do it, I know, in some of the evaluations made of the effectiveness of certain programs within a county by comparing a similar group that did not

have the course experience. One has to recognize the roughness of the estimate and has to make statistical allowances for the differences in the sampling, but, as Mr. Vines pointed out, he did get a kind of estimate that was useful to him in making some appraisal of what the course on Farm and Home Development had done.

Another useful method is to have the student reflect on his experiences and make judgments about the kinds of changes that he thinks have taken place. This sort of evidence is useful, especially if you can compare it with other evidences that are based on observations made outside of the person concerned. I think it is possible for the teacher as he observes the students in action to note certain changes, although it might be more helpful to him if he made some kind of notes of the way they responded, the sort of attitude that they showed in the early part of the course; the sorts of concepts that they used; the kinds of understanding; the way they attacked problems; and then compared this with evidence at some later time.

The fifth difficulty that has been mentioned is how to obtain evidence of effectiveness during the course so that modifications can be made before it is too late. It is clear that a long-term appraisal of a course can give you information that you can use next year or the year after, and many of you, as I have guessed that you would, have been saying, "Well, I taught this course last year and I learned that this did work, or that did not work, and so on." What I think is meant by those who mention this fifth difficulty is that they would like to make some appraisals while the course is going on rather than wait until the end, so as to improve the course in process. Of course, this is difficult because the tempo of a three weeks' course, as you know much better than I, is very fast. The possibility of getting information and trying to do much systematic planning afterwards is limited. But within that framework it is certainly true that there are some kinds of brief tests that can be given or some modifications can be made from day-to-day observations. The main way of solving this problem to the extent that it can be solved, and I do not think it can be wholly solved to anybody's satisfaction because of the limitations of time, is to make yourself as sensitive as possible to evidences of the sort of behavior that you are trying to develop. One needs to become aware of those evidences that are shown in the day-by-day contact--when you are guiding a discussion, noting the failure of certain concepts to carry over in the students' comments; or when you are having problems solved by the group, noting where they fail to take into account certain principles that they ought to have known or, correspondingly, on the positive side, noting the evidence of where the thing is working; what things seem to be getting across very well. But probably your more adequate modifications, if any are needed, will grow out of systematic study of the results in planning for next year, just as many of you are doing here for courses that you have taught this past summer.

A sixth difficulty is the one of how to get comprehensive appraisal towards the end of the course in order to evaluate how far the students have progressed during the course. Most of the outlines that I have looked at suggest a variety of possibilities. Some of you, for example, plan to use tests that you in many cases have written, or to use problems or other forms of written exercises. You also have discussions in which students

are participating which provide an opportunity to make appraisal, to get evidence about particular objectives. If you think that you are in a position to do so, individual interviewing from time to time, conferences with individual students or small groups, provide opportunities to get evidence of behavior. The major problem here is to be clear about what you are looking for. My experience suggests that the difficulty of getting evidence about student progress toward objectives comes more often from a failure to examine the available information, your observations, their papers, the reports, and other things that students do in terms of the objectives than from the lack of methods of appraisal. The better analysis and better interpretation of what we already have at hand will often be more useful than the collection of additional material.

In this connection I noticed in conversation with several of you that there are differences of opinion about the kind of devices to be used to get evidence at the end of the course. Some people feel that examinations are frightening, especially to older students. I think the problem here is best solved, not by discarding examinations, but by helping the student to see the role of an examination not as a way of showing him up as inadequate but as a parallel to a diagnosis made by a physician. When one goes to a physician for a physical difficulty, he expects to go through a battery of tests and to be helped rather than to be chagrined by the results that he finds. The physician is using these results to help him plan a course of treatment just as the good instructor uses the results to help him plan an instructional program. You may find other devices more useful, but I am a little disturbed about the idea of throwing out any particular device in general rather than examining it as an appropriate way of getting evidence for a particular objective.

The same could be said of student ratings. This also has been mentioned several times this week. It is clear that students' efforts to rate a course must always be interpreted in terms of the evidence the student has on which to base a rating, and I have seen, and no doubt you have seen, types of check lists or rating lists or other evaluation devices, in which a student was asked to make judgments that I think he would be in no position to make because he wouldn't have the evidence. My conversations cause me to infer that some of you will say that student ratings are wonderful and others to say, "I would never use them." I think, again, I would not throw out the device in general, but rather ask myself whether we can get opinions from the students within a reasonable time limit which do not duplicate other materials and which will be useful in getting evidence about the program.

The seventh difficulty mentioned here is how to get a follow-up some time later. We all recognize the logic of the need for checking the effectiveness of an educational experience in terms of its later adequacy. This is due to two reasons: first, because we are trying to attain goals that are in the end part of being a better person on the job, and second, because there are widely varying rates of forgetting what one learns, so we wonder how permanent the student's learning really is. The difficulty of a followup later is great when students and staff members come from various States. Does that mean that no follow up is possible? I am not going to talk about what is practicable in the extension structure because

you who are in it who direct others are able to judge what is possible. Rather, I am going to suggest some of the things that we have done in attacking this problem. The most obvious one, of course, is making use of the principle of sampling. We do not follow up every student, but if we have had considerable numbers, we may follow up $1/4$, or $1/3$, or $1/10$, depending upon the number. We can often get a representative sample without facing too big a job. The second possibility is that the total extension service in which one is working is such that the cooperation of employing officers and supervisors permits the collection of data which I, as a teacher, would not be able to get by myself. For example, in a study of nursing graduates, we were able, through the cooperation of employing officers and supervisors, to get check lists and questionnaires filled out which gave data related to the main objectives we were seeking to appraise. Such a followup is not impossible in the extension service which has a well-organized structure both at the State and national level.

This treatment of evaluation is not a comprehensive one, for the report of the Purdue Workshop provides that. It does open up the chief questions that have been raised here and should lead to further discussion in our working groups.

THE INSTRUCTOR STUDIES HIMSELF

by

Cyril O. Houle

Professor of Education

The University of Chicago

(Editor's note: In his presentation to the Workshop, Mr. Houle made a few introductory remarks and then proposed for discussion by the entire group three statements which he had prepared. Since the comments of the members of the Workshop ranged fully and freely over the nature and implications of these statements, no effort has been made here to reproduce all that was said. Instead this present report has six parts: the introductory remarks; the three statements, and Mr. Houle's initial comments concerning them; a brief selection of central points which were made in the discussion; and a conclusion.)

I. WHAT MAKES AN EFFECTIVE TEACHER

When I was in England last year I heard a story which was apparently left over from the days of the war. At the close of a particularly violent air raid, 'Erbert and Maude were observed climbing up to the ground level from the air raid shelter. Maude said, "'Erbert, I know it was dark down there, but you really shouldn't have kissed me like that." 'Erbert looked at her in surprise. "I didn't kiss you," he said. Maude answered, "Well, somebody did." 'Erbert clenched his fist and retorted, "I'd like to know who it was; I'd teach him." To which Maude sighed and answered, "You couldn't teach him nothing."

As I stand here before a group of people who have for so long been thinking about how teaching may be improved, it seems to me perfectly clear that my task is not to present new material. Like 'Erbert, "I couldn't teach you nothing." Rather, I shall try to suggest a way of looking at the task of teaching and the role of the teacher that will permit us to have a framework for discussion, a set of conceptions that will be useful to us all. My conception of you is of a group of people who have given long and deep thought to the question of how you may be better teachers yourselves and help others be better teachers. But you are also a group of people who come from very diverse backgrounds, and who, therefore, have thought about the task of teaching in basically different situations: now as an extension specialist trying to work with a particular agent; now as an administrator trying to assist his staff to understand new conceptions of extension; now as a home demonstration agent giving a method demonstration. And so on, for all the many teaching tasks of extension. Each of you, when we talk about teaching, or learning, or education comes to the task from his or her distinctive background. As I have listened to our conversations at this Workshop, I have realized increasingly that many of the things we say to one another are based on different conceptions which spring from our different backgrounds. Since this is true, we cannot discuss our agreements and disagreements without a framework in which our real differences may be seen more sharply and which permits us to communicate with each other more effectively the things we have learned from our past experience.

Mr. Tyler throughout has placed his emphasis on the learner, and I shall place my emphasis on the teacher. Surely we should all recognize that his

emphasis is the more basic. The learner is the central figure in any program of education, and the seven principles that Mr. Tyler has enunciated are the basic principles which have to do with learning. I hope you understand that I am attempting to build my comments upon the very firm foundation that Mr. Tyler has already laid down. (After all, he and I were colleagues at the University of Chicago for fifteen years before he retired to a life of ease, and I am not unfamiliar with the Tyler rationale.)

But before I deal with the basic kinds of things to which I hope to devote most of my attention, I would like to mention two or three matters which seem to me (as I have listened to the group discussions at all kinds of places these past several days) to be worrying you so that you keep on talking about them. On these matters I don't really believe you differ at all. You have certain minor shades of emphasis, but basically you believe the same thing.

The first question is about which is more important, subject matter or method. I venture to say flatly that all of you really believe that both are important and that most of your discussion is really a discussion of emphasis. If too much is said about method, then something should be said about subject matter. If too much is said about subject matter, then something had better be said about method. You remember that Alice in Wonderland, in walking along, came upon the Cheshire cat, which sat in a tree and grinned and grinned. And as Alice watched the Cheshire cat, it began slowly to fade away until nothing was left but the grin. Now, as children, we all thought that joke was very funny because, of course, how can you have a grin without a cat? And yet, if we talk about methods exclusively, we find ourselves in Wonderland. In reality, you can't have the grin without the cat. All of us believe that there has to be both substance and a method of presentation of that substance. Today and tomorrow I shall talk about the grin but I shall assume that the cat is always there.

The second question is whether the art of teaching can be taught. At this meeting there has been much talk about natural-born teachers. I am perfectly well prepared to believe, since human beings differ so much in their native capacity and in the way experience has changed them, that there may be a natural-born teacher. There may be a person who is gifted by nature with certain fundamental physical attributes and whose personality has so developed over the years that he has turned quite naturally into a brilliant teacher. The only thing that I would like to observe is that, though they are statistically possible, I have never seen one.

Mr. Blakely, in quoting from Emerson, reminded me of the fact that a century ago Emerson was the personification of the great teacher. His students were the people of the United States. What happened when he taught them? A slight man, dressed in black, with a cameo profile and an aureole of white hair, mounted slowly to a rostrum and stood there. Presently he opened his mouth and began to talk. No lightning flashed and no thunder sounded. But as the soft, gentle voice continued, somehow the audience was caught up by what he said. Presently he had the entire group in his grip and was able to do it with whatever he wished. It was said that if you once heard Emerson talk you never forgot him. When his journal was read after his death, it was discovered that this easy, natural, open approach was as carefully contrived as anything could be. He had thought how to dress, how to walk out onto the

platform, how to open his remarks. He had sharpened and shaped his sentences; he had carefully arranged them in the most effective form. This easy, natural-seeming method which he had presented to the audience was, in reality, a carefully carpentered approach. Nothing pleased him so much as to be called a natural-born teacher. Oliver Wendell Holmes said to him once, "I am forced to study effects. You and others may be able to combine popular effect with the exhibition of truth. I cannot." Emerson recorded this remark with great appreciation, for he knew well that it is the height of art to conceal art.

When I see someone step up to the tee and drive a ball far down the fairway, when I see someone execute a perfect swan dive, or when I see someone give a demonstration of water skiing, I always observe that the masterful performer makes his skill look easy, but it never occurs to me that he is a natural-born golfer, or a natural-born diver, or a natural-born skier. I know that countless hours have gone into the development of the skill. Though we are gifted by nature with different endowments and though our experience shapes and develops those endowments in different ways, we should not expect to become great teachers without careful thought and careful practice.

Even though there were natural-born teachers, the rest of us would have to study what it is they do, just as the poor cook must learn from the good cook, and as the poor farmer must learn from the good farmer. Teaching is an art and it must, therefore, be studied as any art needs to be studied. There is, to be sure, one attribute of the people we call "natural-born teachers" that perhaps the rest of us do not have, at least in so great a measure. They realize that teaching is a matter of the impact of the whole personality. Teaching is not the learning of techniques and their application. Sometimes we talk about the skills of teaching as though they were a series of card games that we could learn. Tonight we will play canasta and tomorrow night we will play bridge. Tonight we will lead a group discussion and tomorrow night we will have a film showing. If we think about it, however, all of us would agree that teaching is in fact a matter of the whole personality.

To help people learn how to teach effectively, one thing we must do is to show them how the things we want them to do can be done as a part of their normal and natural activity. Professor White from the University of Wisconsin was telling me the other day about the work he is doing in training county agents to get newspaper publicity. The principle that he is now using is to show the county agent how quite naturally out of his own daily activity there flow stories that are of interest to his townspeople and how, in his contacts and his work with the community, it is possible to get radio people, newspaper people, and television people interested. In other words, the techniques of mass communication are not taught as a set of techniques. They are taught as a way of enabling the county agents to do these things naturally. This is a very important concept that we have to get over, for there is nothing worse than a man, or a woman either, using a technique which is not comfortable to him and which he has not mastered.

Another goal at which we should aim is to broaden the personalities of extension workers so that they are able comfortably to use new techniques. We want not only to get techniques fitted within present conceptual patterns

but also to enlarge those conceptions. This is why we must always be concerned with theory because unless we have theory, we do not know how to absorb and use techniques. Many here will remember Dean Trotter's pungent speech last year on the importance of theory in graduate work, and I, for one, am very pleased to see that Dr. Clark is thinking so seriously about the broadening of the conceptions of the people who will come into the new Center at the University of Wisconsin. We all hope that he and his staff will be able, by their research, to help us to know how this enlargement of the personality can occur.

And so let me say again that teaching--the attempt of one person to influence another--is never a specialized technique. It is always the impact of the whole personality of the teacher upon the individual or groups with whom he deals. A home demonstration agent was telling me not long ago that in her program planning one year she discovered that most of the clubs in the county all wanted to deal with weight reduction. She could not think why this was true until she suddenly remembered that in the previous year she had taken off 30 pounds! In her county, program planning was extraordinarily democratic and she had done all the right things to keep from influencing people unduly. But what she was turned out to be more important than what she did. The impact of her personality had had its effect. In both minor and major matters, extension staff members are centers of influence. This is true in the county, and it is even more significant at the State level, where the supervisors, the specialists, and the administrators exercise their influence over a larger part of the work.

II. FITTING TEACHING TECHNIQUES TO INDIVIDUAL SITUATIONS.

Let me return now to my earlier point that we come from various backgrounds. As I have said, this fact makes it difficult for us to communicate because we are always thinking of education as occurring only in our own specific frameworks. A group of elementary school teachers has a common base of reference since all of them are concerned with the education of children of about the same age who are undertaking group learning in a single kind of institution. We in adult education can seldom have so simple a framework as this, simply because we have so many patterns for our work.

It is for this reason that I have developed (and present to you on the sheets that are being handed out) an analysis of the basic educational patterns.

Any consideration of teaching methodology must first be based on the determination of the basic pattern which is being used. The fundamental principles of method differ from one pattern to another. All of you have experienced all of these patterns. I suggest that you think for a moment about each one and see how different they are from the other. When one undertakes a program of education for himself he pursues a very different pattern from one who undertakes a similar pattern with a group. When a teacher teaches an individual, the process is very different from that used when a teacher teaches a group. And so it goes. Each pattern sets its own framework and every discussion of method must begin by defining the pattern within which the learning is being undertaken.

Basic Educational Patterns

1. A person undertakes a program of education for himself.

A homemaker uses a government bulletin to guide her in making slipcovers.

A farmer planning to buy a new piece of farm machinery visits some of his neighbors who already own it in order to help him decide whether it is suitable for his situation and, if so, which of several competing brands he should buy.

A county agent wishing to improve his performance reads printed material on adult education, attends State and national adult educational conferences, and visits other programs.

2. A teacher provides learning experiences for an individual.

A county agent trains an assistant county agent.

A specialist teaches a new process to a home demonstration agent.

A county agent works with a farmer to help him improve his system of farm accounts.

3. A group undertakes a program of education for itself.

A club develops and conducts its own program with no outside assistance.

A State extension staff works collaboratively to understand basic principles of administration, supervision, program planning, and evaluation.

A subgroup at a workshop develops basic principles to bring back to the entire gathering.

4. A teacher provides learning experiences for a group.

A home agent conducts a demonstration session for a local group.

A college faculty member teaches a course in extension methods.

A workshop consultant leads a group in a discussion of basic educational patterns.

5. A teacher educates a generalized, ungrouped audience.

A specialist prepares a bulletin.

A county agent gives a demonstration on a television station.

A home agent writes a column for the county newspaper.

Let me make clear the fact that I have used the term "teacher" very deliberately to mean a person who himself possesses the ideas, the skills, or the knowledge which are to be conveyed by the learning process. A "leader" (which is a term sometimes used synonymously with "teacher") is, in my conception, very different. In pattern three, a group may have a leader who is merely, so to speak, the first among equals. He does not teach the others.

Here we gain an insight into one of the classic difficulties of adult education. We all know the problem which arises when a leader tries to be a teacher but the group merely wants him to be a leader. We know, too, the difficulty which presents itself when a group wants instruction but the teacher insists on being merely a leader. What we have is a confusion between the patterns, with a very real disagreement about which is the right one to be followed. Unfortunately many people do not realize that there are various alternative patterns, each of which is acceptable. They insist that there is only one and choose one of the five which I have suggested, imposing its principles and its methods on all situations. A group which sincerely wants to be taught should not be forced to be a group which is merely led. And a group which wants to be led should not be required to accept a teacher it does not wish to have.

It is my belief that if you examine the patterns I have suggested, you will find a similar theoretical basis for some very real problems and difficulties you encounter in the field. Let us talk together now about this statement and about whether it is useful to you in your work.

If the improvement of teaching depends upon the realization of which basic pattern is being used, we must recognize that there are many principles and devices which are relevant to each specific pattern. The Self-rating Sheet for Teachers which is now being passed out suggests some of the principles which are significant in pattern 4. Perhaps some of these principles are also relevant in other patterns, but for the moment let us consider only their significance in pattern 4.

Let me tell you how these particular principles were derived because my method of doing so may suggest a technique which you can use. It happens that I have often been called upon to train so-called "lay" teachers--people who have a knowledge of content but do not know how to teach it. They may be engaged in an evening school or a first-aid program or a civil-defense training activity. In any such case, the people who are about to become teachers want to know how to put across the knowledge they possess. My technique is to ask them to think about some effective learning situation in the past and to see if they can analyze what principles were used in it to make it effective. By a process of group discussion and the use of the blackboard, it is possible to derive a set of principles which grow out of the past experience of the members of the group.

The list which results is then turned into a self-rating sheet which the leaders can use later on when they are at work. We have found that because they developed the principles themselves, they have a tendency to understand and use them. Because they are conscious during each class that they will have to rate themselves on these principles, they consider their teaching far more carefully.

Self-Rating Sheet for Teachers

At the close of every session, rate it in terms of its accomplishment of each of the qualities of a good discussion. Use the following rating scale:

- 3 - Notably successful. 2 - Moderately successful. 1 - Unsuccessful.
- Be honest! Remember that a score of 27 is almost impossible to achieve.

Qualities of a Good Teacher-Group Learning Situation	Sessions											
	1	2	3	4	5	6	7	8	9	10	11	12
1. The physical setting was attractive and comfortable ...												
2. There was a good social feeling												
3. The teacher had a basic plan but was flexible in his use of it.....												
4. The path of progress was kept open for each individual member												
5. The experience of the members of the group was used to enrich the discussion												
6. All of the members of the group seemed to feel a responsibility for the effective conduct of the group .												
7. All members of the group understood both the immediate and the ultimate goals												
8. Methods and procedures were as varied as possible												
9. The group based the discussion on facts and experience as well as opinion												
TOTAL SCORE												

More than fifty groups of lay teachers have now been trained in part by the use of this technique and no two of them have ever come up with the same set of principles. For the most part, however, there are common elements in all the lists and the nine principles on the self-rating sheet which I have distributed are usually brought forward in one form or another.

You will understand that this self-rating sheet is merely a device for illustrating the general point with which I began: each of the basic patterns of education has its own distinctive principles of methodology.

We come now to the last of three formulations. It spells out--perhaps rather laboriously--the basic methods or techniques of learning and puts them into certain categories which may be useful to you. In most cases, illustrations of the use of each method have been suggested.

In most actual learning situations, a combination of techniques is found to be useful and actually some of these combinations seem almost to become new methods. In considering the question of effective teaching, however, I usually try to push through to the basic techniques because only when this is done can we determine the exact set of ingredients which is being used to create successful learning.

You may not wish to accept this categorization of techniques and I certainly hope you will want to test it rigorously against your own conceptions and experience. Perhaps you will all agree, however, that some analysis is desirable and that whatever analysis is used, we will all have to conclude that a part of desirable teaching is the mastery of particular techniques. Each method must be learned. It is a skill. Not everyone can--or would want to--use all of the techniques. But the ones he wants to use he must learn.

Some Categories of Method

- A. When an individual or group undertakes a program of education without a teacher.
 - 1. The selecting of certain experiences for their educative effect.
 - 2. The self-directed use of the instruments of education.
 - 3. The search for original truth.
 - 4. Introspective analysis.
 - 5. The collaborative effort of a group to understand itself and its own structure and processes.
- B. When there is the intent of a teacher to teach but not the intent on the part of the prospective learners to learn.
 - 1. The handling of processes undertaken for noneducative reasons in such a way that they will produce educative results. Examples:
 - a. Introduction of educative content into the mass media (radio, television, commercial motion pictures, popular printing).
 - b. The deliberate handling of problem-solving and action processes in such a way that they will yield maximum educative benefit to those who participate.

- c. The use of recreational and group-work processes to achieve constructive values.
 2. The reconstruction of the physical and social environment to introduce educative elements. Examples:
 - a. Slum clearance, housing, and community planning in order to raise the quality of living.
 - b. The deliberative planning of group activities to include diversity of representation.
 3. The establishment of barriers and restraints which can only be surmounted by education.
- C. When there is the intent of a teacher to teach and the intent of a learner to learn.
1. The oral presentation of material by one person. (speech, lecture)
 2. The oral presentation of related material by a group of people. (symposium, debate)
 3. The demonstration of a practice or process.
 - by an expert in the practice or process.
 - by a person who uses the practice or process with the intent of discovering its effectiveness.
 4. Discussion.
 - directed to the formulation of problems.
 - directed to the formulation of principles.
 - directed to the common exploration of a topic.
 - directed to the analysis of a shared experience.
 - directed to the formulation of a plan of action.
 5. The use of a formal instrument designed for education. (printed materials, film, recording, exhibit)
 6. The repetition of an action to gain competence in its performance. (drill)
 7. The directed observation of real experience. (field trips, clinic)
 8. The use of artificial devices or systems to aid memory. (mnemonics)
 9. The questioning of an authority or group of authorities. (interviewing)
 10. The observation by an individual or group of the educational activities of others. (panel)
 11. The performance of an action under the direct supervision of one who aids in the steps of its mastery. (coaching)
 12. The acquisition of a principle or set of principles through the performance of an operation which requires its use. (laboratory)

13. The artificial stimulation of a real experience. (role playing psychodrama)
14. The analysis of specific cases to get at the principles or special situations which lie behind them. (case method)
15. The formulation by the student of hypothetical situations or actual objects which embody principles. (shopwork)
16. The statement by the student in his own words of material originally formulated by others. (recitation)
17. The guided exploration by the student of a topic, question, or problem. (workshop, term paper, use of reader's advisor)

(The following general points were a few of those which emerged from the discussion.)

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We sometimes have a tendency to believe that all learning occurs during a class or the meeting of a group. Actually, in programs which involve series of meetings, more learning may take place between sessions than at them. It is part of the task of the good teacher to see that the students are left with something to consider and think about.

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Probably nobody can use all of the methods suggested on the list given to the group. People who are good at one method may be poor at another. One way, however, to extend one's teaching competence is deliberately to attempt to master a new method. Since techniques are usually combined in practice, the learning of a new technique may provide all kinds of opportunities for combination.

- -

Is a good social feeling always desirable in a group? Does not learning sometimes occur more readily when there is conflict? In answer to these questions, we must remember that there are all degrees of conflict. At one extreme is sharp and naked disagreement, in which feelings run deep and personal antipathies are developed. At the other extreme is the conflict which develops between or among people who are in basic sympathy and agreement with one another, who have a common core of values and ideas and understandings and who find it possible, because they have this common core, to talk with one another and to state their positions sharply, clearly, and effectively. The first kind of conflict is certainly provocative of change in people but it is essentially negative. The second kind has far more potentialities for constructive and positive learning.

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The really excellent teacher is one who has used the principles of good teaching for so long and with such effectiveness that it is no longer necessary for them to be called consciously to mind.

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If a group has little or no social feeling and demonstrates a great deal of mutual antipathy among its members, it may be necessary for the leader to go outside the group itself to try to improve the situation. He may, for example, talk independently to each one of the group's members, saying, "What

can you and I do to improve things?" Or he may appeal to some external source of influence which might stimulate the whole group or its individual members to change their patterns of behavior.

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In deciding which method to use in any particular situation, the fundamental principle is to look first at the objective which is to be sought. As Mr. Tyler has so eloquently pointed out, the same objective can be achieved by a number of different means, but it does not follow that all objectives can be secured by all means. It is very hard, for example, to teach swimming by the discussion method. But it is true that selection of method is usually necessary, even after the objective has refined the field. The factors which then come into play are numerous, but among them are these: the familiarity of the teacher with the various possible methods; the interest of the group; the availability of materials or equipment (as in the use of bulletins or of visual aids); the time available; and the relationship of this particular objective to others which are also being sought. The leader or teacher must make his choice by balancing these various factors in his mind.

SUMMARY

And now, as we come to the conclusion of our three hours of discussion, perhaps it is necessary to integrate all of the things we have been considering. We have said:

First, the learner is the true focus of education and good teaching is always concerned with how the learner is to be changed.

Second, teaching takes place within certain basic social situations and its nature varies greatly as these situations vary. Five basic patterns have been suggested.

Third, in each pattern there are fundamental principles which govern good teaching. This point has been illustrated by the checklist which presents nine such principles.

Fourth, there are certain specific techniques of teaching which must be learned.

In moving gradually from the basic theoretical consideration of learning and teaching to the specific techniques which are used in particular situations, we have had an illustration of how theory and practice always relate to one another. One might very well understand the structure of theory with which my remarks began and yet be completely unable to use effectively any of the techniques we have discussed. On the other hand, one might be able to use a number of the techniques but still be very superficial in his effects because he does not understand how the techniques relate to the whole process of teaching. Theory and practice are essential and they must be interrelated. The good teacher is neither the abstract thinker nor the accomplished user of various tricks. The good teacher is both.

AN OVERVIEW OF EXTENSION REGIONAL SUMMER SCHOOLS

by

Dr. J. Paul Leagans
Professor of Extension Education
Cornell University

One of man's greatest concerns through all of history has been an answer to the question: How best to transmit knowledge? Or more specifically, how best to promote learning, or still more explicitly, how best to teach. These questions are paramount among our concerns at this workshop. Certainly they are important to each of us who accepts responsibility for a course in one of our regional schools.

I have given considerable thought to what might be most useful during this final period of the workshop. Since coming, I have talked with many of you. Your steering committee has given me some excellent suggestions. From these efforts, two conclusions seem justified.

First, there are questions in the minds of many of us about the most effective role regional schools can play in our total professional improvement programs, and, second, these concerns quite clearly group themselves into several areas. These areas are as follows:

1. What are the fields of knowledge in which extension workers need some degree of professional competency?
2. What is the role of regional summer schools in our total professional improvement program?
3. What courses should be offered in regional schools?
4. How can we improve integration of courses within schools, among schools, with other training opportunities, and with the professional needs of extension workers?
5. How can a staff be developed and maintained that can provide in each school the highest level of instruction?

Obviously we cannot explore intensively each of these important concerns. It was the intent of our workshop planning committee that we have opportunity during this period to exchange ideas about these topics, not with the thought of arriving at a group decision but rather to explore ways of approaching the problems. Since, by necessity, the time available for this discussion is considerably shorter than originally planned, it has been suggested that I present to you some of the materials I have put together and leave them for your consideration. I shall proceed to do this, but with considerable reluctance. My hesitation stems from the following facts: first, most of the problem areas mentioned have no easy answer; second, the conclusions I have drawn with respect to a number of areas are likely to be no more valid than those you hold; and, third, the belief that this group could derive better answers than any of us could individually.

Within this framework then, let me summarize some ideas relative to each of these five major topics.

I. What Are the Fields of Knowledge in Which a Well-Trained Extension Worker Needs Some Competence?

This is one of our most basic questions. The tendency in the past, and particularly during the beginning of extension work, was to answer this question by saying, "Technical subject matter in the field of agriculture or home economics constitutes proper training for extension workers." This answer, as all of us know, has never been a complete one and has constantly grown less adequate. Each year in extension we are learning more about the great problem of how to promote learning through the teaching process. We are increasingly recognizing that the only way to attain the true ends of extension education is through promotion of learning on the part of those who have use for the program. We must continue to emphasize that a good grasp of subject matter is basic in extension work, but at the same time it is becoming clearer with experience that this competency is only one of those which an extension worker must possess for maximum effectiveness. It is indeed a recognition of this fact by our extension administrators and others in our colleges of agriculture and home economics that has given rise to regional summer schools and to the programs in several colleges and universities offering graduate level study oriented to the special problems of extension people. The great area then, that lies beyond the field of technical subject matter in which extension workers must become competent, is the realm of educational processes, or how to teach. When one examines the basic assumptions underlying our regional schools and the graduate programs in our universities dealing with extension education, it becomes clear that one of the primary ones is that there is now accumulated a body of content in the field of extension educational processes that is worthy of recognition by a graduate school. From these points it is my conclusion that there are two primary areas in which extension workers must have competency. One is technical subject matter, or what to teach; the other is educational processes, or how to teach.

The discussion of course content, therefore, should no longer deal with the question of which one but rather with what amounts and kinds of insight into each of the fields are most useful for the well-trained extension worker. It is not a question of one or the other, but of one and the other in proper proportion. Assuming that every extension worker must be well acquainted with technical subject matter, what then should one study in the field of the social sciences to give him greater competence in handling people? More specifically, what course work will provide (1) a broader understanding of the basic processes by which lay people are involved in program development, and (2) an appreciation of the procedures needed in organizing an effective series of learning experiences.

Competency in these two areas obviously must draw on an extensive range of other related fields of knowledge. That is to say, that a single course in program building or teaching cannot develop the breadth of knowledge that is requisite to a thorough understanding of the processes involved. One

could hope that the student of extension could have contact with all of the following supporting areas:

1. Rural Sociology--dealing with the elements of social structure, organization, group work, leadership, and the like.
2. Educational psychology-- focusing on an understanding of human behavior and the teaching learning process as it relates to both adults and youth.
3. Communication--dealing with the problems of speaking, writing, and the use of mechanical aids in teaching.
4. Economics--dealing with basic principles of economics, current economic trends and ways of rationally viewing and examining our economic system and public policies.
5. Evaluation--dealing with the processes of collecting, analyzing, and interpreting objective evidence of the strengths and weaknesses of our various extension activities.
6. Administration and supervision--dealing with the function of supervision and administration and methods, techniques, principles and procedures proven to be effective.

Research and accumulated experience are providing us with much new information along these lines that is immensely appropriate to extension workers. It is our task to make people aware that these facts exist and to help them learn to apply them.

II. What Should be the Role of Regional Extension Schools in Our Total Plan for Professional Improvement.

Let us first recognize that in our regional schools we cannot provide all things for all people. If this be so, then the question is: what should be the role of the regional school and for whom should it attempt to play this role? Since our time will not permit discussion of this question, I shall simply list for you several questions which are central in the thinking of many with whom I have talked.

1. Should the function of the regional schools be primarily to provide training that States are unable to handle themselves because of staff or finances?
2. Should the schools be largely a "trainer of trainers" program? In this case should the attendance be confined to experienced agents and State staff? If this were done, how could we use the trained people to best advantage back in the States to train others?
3. What should be the relationship of regional schools to inservice training programs within States and the work offered in our graduate schools? There is a concern on the part of many about the

question of whether some of the content included in our regional schools curriculum is not more properly a function of inservice training back in the States. In fact, several have suggested that certain materials may be dealt with more effectively within the States. It appears clear then, that conclusions regarding the relationship of our schools to other forms of training have extensive implications that must be examined carefully in considering a curriculum for regional schools.

4. Should the doors of regional schools be opened to all comers? If so, do we expect the work of our regional schools to be recognized by graduate schools as graduate level work and accepted as such?
5. Should the regional schools attempt to provide training in all appropriate fields or should they confine their program to more central areas? If confined to central areas of content, what should these be?

III. What Courses Should be Offered in Regional Schools?

Suitable answers to the questions posed under the previous topic (II), dealing with the relationship of our regional schools to other forms of professional training for extension workers, are prerequisite to an adequate answer to this question. I must, therefore, leave you without answers and with additional important questions.

Preliminary plans are developed for offering 18 courses in the five regional schools next summer. I have examined several announcements going back a few years that carried the courses offered in the past in the schools. This summary revealed a number of interesting things. Among the most significant for us in thinking of this particular question is the fact that more than 40 different courses have been offered in our regional schools at one time or another. It is interesting to note that this number is considerably beyond the number of courses a student in most of our graduate schools commonly would take in his total program both for a master's and a Ph.D. degree. In making this statement my intent is not to judge whether this is a good situation or not, but merely to report the facts. May I again call your attention to the fact that 18 courses are planned for next summer's offerings. Because we cannot take time to look at these as a whole, let me leave with you several questions that require serious consideration in this overview of our regional summer school curriculum.

1. In view of the role of regional schools as you see it, are the courses planned for next year appropriate?
2. Is there a group of core courses that should be given each year at all schools? One work group committee has suggested that program building, teaching and evaluation are courses that might be considered for offering each year at all schools.
3. Is the list too comprehensive or too narrow?

4. What is the relationship of the courses to each other, to the overall curriculum, and to other forms of professional improvement opportunity?
5. Are there courses in the list that should be given on a national basis and rotated from school to school, such as the supervision course in the past?
6. At what level of difficulty should the course content be set?

An analysis of attendance reveals the fact that approximately 90% of the participants in regional schools to date have consisted of county extension workers. In the light of this fact it appears that, in deciding on a curriculum, we should ask: What is likely to be the future role of the county extension workers? Up to recently we have tended to operate on the assumption that extension's job is to provide knowledge and leave the farmer and homemaker to make their own application. Accumulating knowledge about methods of influencing human behavior is showing, quite consistently, that the job of education is not that simple. The simple principle applicable here is that it is not what one merely knows, but what he comes to believe that determines how he behaves when he is free to act as he chooses. The implication of this principle is that we need to think more about how to stimulate application. Imparting knowledge is only part of the process. This suggests that our overall summer school curriculum may well include greater emphasis on how to stimulate action. It requires an identification and understanding of the values of each person and family group, and the identification of what they really desire and think is important. In short, this task requires the highest skill in the art of teaching. It requires an understanding of the problems of the mind as well as those of the farm and the home.

IV. How Can Integration in Our Regional School Curriculum Be Improved?

The achievement of integration in the curriculum of our schools is both important and difficult. Integration has to do with the organization of courses so that students are able to see the parts in relation to each other and to the whole. An effective curriculum requires that students ultimately obtain a well-rounded view of the various contents to which they are exposed and with which they are expected to become acquainted. Achieving better integration within, and among, our schools is a topic we all should discuss. Briefly, let me summarize a few ideas that appear useful as a basis for thinking about ways to strengthen integration.

1. Each staff member should develop an outline of his course. This may follow closely the plan of the outlines developed by various groups in this workshop. Experience has shown that a well-developed outline contributes to the effectiveness of the course in a number of ways. First, it forces the instructor to think through quite carefully the materials he proposes to present and some of the techniques to be used. Secondly, an outline provides a useful guide, not only to the instructor but also to the students, which enables both of them to gain and maintain a clear view of the course

as well as the respective parts to be dealt with. Third, a course outline enables students to maintain a clear view of what it is they are expected to learn.

2. Directors of regional schools should collect course outlines from all instructors a few days before the school opening and prepare a single list of all the objectives set forth for each course.
3. Hold a staff meeting prior to opening of the school. Adequate time at this meeting should be provided to enable the entire staff to examine the stated objectives for each course and, in general, the content and major learning experiences to be provided. Among other values this meeting should serve to acquaint all staff members with the basic objectives, content, and plan for each course. With this background, each instructor can point out to his students, periodically throughout the course, the relationship of his course to others being offered as well as to other areas of knowledge that bear on his particular course.
4. At the first general assembly of students following registration, discuss with the students the following topics:
 - a. The objectives and role of the regional school as one aspect of our total professional improvement program for extension workers.
 - b. Overall aspects of the particular regional school.
 - c. Requirements and expectations of both staff and students.
5. Arrange for a series of assemblies of the total group as early in the session as practicable. During these assemblies, each staff member present to the group an overview of his total course. In this presentation staff members should make clear the objectives of the course, its general content, and how major objectives of the course relate to other courses. These assemblies probably should be on a voluntary basis, and should be set for an hour and one-half in length.

V. How Can an Effective Staff be Recruited, Trained, and Maintained?

It must be constantly kept in mind that attendance in our regional schools is largely on a voluntary basis. In large measure we face in the regional schools one of the important problems with which county extension workers have to deal, that is, the problem of making our offerings sufficiently useful and otherwise attractive that we get "repeat attendance." The importance of getting a favorable "grapevine message" which results in others becoming interested in attending the regional schools should not be overlooked. This is to say that the content in various courses must be in line with the real needs and interests of participants, that students must

find the content useful after returning home, and that the methods and techniques of presentation must be sufficiently attractive that a favorable reaction among students is created and accumulated.

If outcomes such as these are to be realized, regional schools must provide an adequate and highly skillful staff. I think no professional group is more critical of a poor job, nor more complimentary of a good job than extension people. This is true both of themselves as well as of others. In my judgment, this characteristic is one of the important factors contributing to the success extension has realized over the past forty years.

SUMMARY

Increasingly it is becoming recognized that effective learning results from design, not drift; it results from a plan, not from trial and error. Promoting learning, then, is an intentional process both on the part of the learner and the instructor. Providing effective learning situations is the greatest problem of extension workers. It becomes, therefore, the main overall objective of our regional schools. The course content must be presented with this in mind. The instructor must set the students a good example.

ORGANIZATION AND TECHNIQUES FOR SMALL WORK GROUPS

by

J. Neil Raudabaugh, Extension Analyst

Program Research Branch

Division of Extension Research and Training

Federal Extension Service

Before we move from these general sessions into small work groups, let's take a quick look at what we have been doing and at what lies ahead. All of us are familiar with the dynamics of a workshop, but it may enhance our productivity if we briefly survey what we have been doing and the job ahead for the work groups.

In the general sessions we have been defining problems, arriving at some common understandings, developing a more uniform concept of our objectives for regional extension summer schools. Upon this broad base, the work groups will not attempt to develop outlines for particular courses for regional extension summer school classes.

Each work group has already had an organizational session to designate a chairman and a recorder or secretary. The work groups are small and the members have had an opportunity to get acquainted and to know each other through the activities of the first day and a half of the workshop. Through these contacts each work group has already assumed a character and existence all its own. Each may become productive early in its work period or it may remain relatively unproductive during the first work session. Good work groups operate with understanding on the part of all the members of what a group is, its procedures, pitfalls and opportunities. Understanding these things, it is easier to keep the group's objectives clearly in mind and to avoid the side roads that often cause delay.

A work group is just like a person--it wants to create, achieve, contribute. It wants to feel free to express itself; to spread all kinds of ideas on the board; to discuss, reject, and combine these ideas. If the group is to "search its soul" without fear of individual slight or ridicule, the first concern of both groups and chairman is to create a friendly, informal atmosphere. There must be no power structure, no jockeying for preeminence, no feeling of subordination. Those situations will arise. With understanding the group can recognize them, laugh at them, remove them.

Good work groups usually proceed with considerable informality. The members of our work groups will be calling one another by their first names and will probably have a kind of first-name attitude toward each other. Our confidence in work groups is bolstered a great deal if we consider the following three points from recent research:

1. The average of group judgment is superior to most individual judgments. When a problem involves a number of people, group thinking will produce better results than the thinking of any one person.

2. A group is more likely to accept good suggestions than to reject them.
3. Groups do not err as soon as the average individual does.

All members bring to a group their own ideas of how a group should function, and in this case what the content of a particular course might be. Perhaps the first thing your group will need to achieve will be to get a common understanding of basic purposes. The process of problem census might start the process of mutual rather than separate thinking. The problem census approach usually serves to start all the people in the group in the direction of deciding on goals. Ideas expressed in such an exploratory period give all the group members an idea of the nature of their thinking and help them to establish a common base from which to start working.

A principle which helps insure work group success is that of shared rather than concentrated leadership. If responsibility is shared by everyone no single person will need feel responsible for the direction of the group, the success or the failure of the group. In this kind of a situation, achievement is usually greater because the members of such a group recognize the fact that everyone can contribute. Work groups that function in this kind of group climate usually make definite progress toward their common goal.

WORK GROUP REPORTS

Suggested objectives, content, procedures, and references for Extension's regional summer school courses as proposed by the work groups.

PSYCHOLOGY FOR EXTENSION WORKERS

Group Members:

Fred P. Frutchey, USDA
Paul J. Kruse, California

W. N. Williamson, Texas
Group leader

I. Objectives

1. Increased understanding of the principles of human behavior.
2. Increased skill in thinking on the problems of extension teaching in terms of these principles.
3. Increased disposition to think on the problems of extension teaching in terms of these principles.

II. Suggested Major Content Units

The following principles are given as examples and not as a complete list of principles which might be included in the course. It is assumed that any instructor will add or subtract from this list.

1. Clarification of terms.
 - a. Psychology is the study of the behavior of man.
 - b. Behavior is usefully studied and described in terms of stimulus and response.
 - c. The task of the extension worker is educational.
 - d. Education is the production of changes in human behavior.
 - e. These changes in human behavior may be usefully classified as:
 - (1) Changes in knowledge or things known.
 - (2) Changes in skills or things done.
 - (3) Changes in attitudes or things felt.
 - f. Teaching is setting situations so as to get behavior that will result in the desired changes.
2. How do humans behave?
 - a. The term instinct is not useful in a description of human behavior for the teacher.
 - b. The teacher needs to know what tendencies to behavior human beings possess.
 - c. Man has some tendencies to behavior that are basic to the process of change we call education.
 - (1) Man has a tendency to find certain states of affairs satisfying.
 - (2) Man has a tendency to find certain states of affairs annoying.

- (3) Man has a tendency to "varied response to an annoying state of affairs until a satisfying condition is attained."
- d. The above tendencies find expression in a variety of ways, including the following:
 - (1) Man has a tendency to self-assertion.
 - (2) Man has a tendency to seek the approval and to avoid the scorn of other humans.
 - (3) Man has a tendency to the presence of other humans.
 - (4) Man has a tendency to attend to situations involving contrasts.
- 3. How and why do people learn?
 - a. Learning is the process whereby an organism, through its own activity, becomes changed as to its behavior.
 - b. Learning is an active process.
 - c. The fundamental principle in learning is the principle of association; experiences that occur together tend to recur together.
 - d. There are two major kinds of learning: problem-solving through trial and error and analysis; conditioning.
 - e. Exercise of the behavior pattern to be fixed is necessary for learning, but it does not insure learning.
 - f. Vividness of the exercise of a behavior pattern promotes learning.
 - g. Three factors conditioning all behavior have particular significance for learning: the set of the learner; the piecemeal activity of the situation; response by analogy.
- 4. How do people differ?
 - a. People differ in their ability to see clearly, to hear acutely, and in their quickness of reaction.
 - b. People differ in the degree of skill they possess; in their attitudes and in their ability to plan and to solve problems.
 - c. Both heredity and environment affect the development of the individual; both are interacting on the individual.

III. General Situations in Which the Principles Apply

- 1. Program planning.
- 2. Selection and use of extension teaching techniques.
- 3. Selection, training, and maintaining interest of local leaders.
- 4. Relationships with other agencies and groups.
- 5. Relationships with the local sponsoring groups.
- 6. Relationships with other staff members--professional and clerical.
- 7. Problems of influencing persons difficult to reach.
- 8. Problems of developing and maintaining local groups organized by extension.
- 9. Use of extension specialists.
- 10. Contacts with the extension supervisors.
- 11. Contacts on financial matters, budget preparation and adjustments, and accounts.
- 12. Decisions in regard to further training and professional improvement.

IV. Learning Experiences

1. It is assumed:
 - a. That a teacher will choose from the following list of techniques any combination of learning experiences which contribute to achievement toward the objectives and which the teacher can handle most effectively.
 - b. That communication should take place not only through words; a range of media of communication is more effective.
 - c. That not all of the knowledge and wisdom in the class rests in the teacher and that much is in the members of the class.
 - d. That the teacher will be alert to diagnose the learning difficulties of the students and select the learning experiences which will help the students reach the objectives of the course.
2. The following techniques, tools, and procedures which can be used to provide learning experiences are many more than can be employed in any three-weeks' course.
 - a. Lectures on principles and discussion of applications to extension problems.
 - b. Questions and answers.
 - c. Specific problems to be treated in writing.
 - d. Study of specified reading materials.
 - e. Individual conferences.
 - f. Examination of listed literature; selection of one or more on which students will report; make available to all students as a stimulus and guide to their further reading.
 - g. Small group discussion.
 - h. Use of case studies.
 - i. Use of visual aids--blackboard, flannel graphs, charts, pictures, slides, movies, etc.
 - j. Use of puzzles to demonstrate and analyze learning.

V. Evaluation

Evaluation is made in terms of the behavior changes desired in keeping with the objectives of the course. Suggested sources and procedures of getting evidence of changed behavior are listed below:

1. Careful reading and evaluation of written treatment of problems.
2. Evaluation of nature and extent of participation in class.
3. Evidence exhibited in individual conferences.
4. Evaluation of their use of related literature.

VI. References

1. A syllabus or other relatively brief organization of the content of the course to serve as the basis of class lecture-discussion. Copy of this in the hands of each student. This makes unnecessary taking of copious notes and frees the students to participate thoughtfully in the class period.

2. Selected references in each major content area. The purpose is to give added authority to the argument of the course.
3. A list of references (30-50) designed to reveal to the students varied approaches in the field of human relations. It will include titles from the popular to the more strictly professional. A major purpose is to stimulate the students to further reading in this area. Browsing among these titles is encouraged, with selection by each student of one title for special brief, written report designed to be helpful to the others as basis for further selection. These reports to be made available to all not later than beginning of third week.

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SOCIOLOGY IN EXTENSION WORK

Group Members:

Gordon Cummings, New York
Mable C. Mack, Oregon
Group Leader
E. O. Moe, Michigan

Bordin Nelson, Texas
Neil Raudabaugh, USDA
Ralph J. Ramsey, Kentucky

Three courses are currently offered in one or more of the regional extension summer schools:

1. Working with groups in extension.
2. Rural social trends.
3. Human relations in the administration of extension programs.

This committee has directed its efforts primarily to building an outline for the course on Working with Groups in Extension. (A description of the content of courses 2 and 3 will be submitted later. It is suggested that only one of these courses be offered in any one summer session.)

WORKING WITH GROUPS

I. Objectives of the Course

1. To increase understanding of the nature of groups and their function in society.
2. To increase understanding of the importance of groups and their function in extension work.
3. To increase understanding of various techniques in working with groups and appropriateness of these techniques in specific situations.
4. To increase skill in the selection and use of group techniques.
5. To develop interest in systematic on-the-job evaluation of group techniques as a basis for further increasing understanding and skill in their use.

II. Content of the Course

1. Nature and function of groups.
 - a. What is a group?
 - b. Types and functions.
 - (1) The place of groups in society.
 - (2) The place of groups in the community.
 - (3) The value of groups to individuals.
 - c. Life cycle of groups.
 - (1) Formation.
 - (2) Building and maintenance.
 - (3) Mortality.
 - d. Interaction in groups.
 - e. Member-leader roles.
 - f. Role of agent: as a professional leader
as a trainer of voluntary leaders.
 - g. Group maturity and productivity.
2. Importance of groups in extension work.
 - a. Groups operating within extension.
 - b. Other groups with which extension works.

3. Techniques in working with groups, such as:

- | | |
|-----------------------------|----------------------------|
| a. Lectures | i. Workshops |
| b. Group Discussion (types) | j. Counseling |
| c. Demonstrations | k. Sociodrama |
| d. Symposium | l. Role-playing |
| e. Panels | m. Dialogue |
| f. Forums | n. Committees |
| g. Surveys | o. Skits |
| h. Conferences | p. Parliamentary procedure |

III. Learning Experiences to be Provided

The following learning experiences are suggested for use in this course to help the students reach the objectives. The timing and combination of methods used as learning experiences will be adjusted to the developmental needs of the class. They are not listed in order of use but the numbers in the right hand column indicate the objectives toward which the learning experiences are directed.

<u>Learning experiences</u>	<u>What the teacher does</u>	<u>What the student does</u>	<u>No. of objectives</u>
1. Nature and function of groups	Lecture	Discussion	1
What is a group?	Film, e.g., "Meeting in Session."	Illustrations of the functions of groups from their own experiences.	
What groups do:		Assigned reading.	
a. for society			
b. for the community			
c. for extension			
d. for their members			
2. Types and functions of groups with whom extension works: policy-making, program development, action.	Lecture - gives illustrations and assignments - suggests ways of classifying groups.	Develop inventory and functional classification of groups with whom agents work.	1,2
3. Member-leader	Lecture to clarify role concept, functional and nonfunctional. Film: "Developing Leadership."	Reading assignment. 1,2,3,4 Practice in role identification. Film Forum.	

<u>Learning experiences</u>	<u>What the teacher does</u>	<u>What the student does</u>	<u>No. of objectives</u>
4. Life-cycle	Lecture - discussion	Provide illustrations. Reading assignment.	1,2,3,4
5. Interaction	Film and/or discussion of group interaction patterns. Tape recording.	Discussion in small groups to identify pattern of interaction. Reading assignment.	1,2,3,4
6. Group productivity.	Lecture-discussion	Relate experience	1,2,3,4
7. Evaluation	Lecture-discussion. Introduce a variety of evaluation devices.	Committee assignment. Practice evaluation of both progress and productivity, following demonstration of techniques.	1,2,3,4
8. Techniques and their selection for use in specific situations.	Involves class in developing a framework for analyzing techniques as a basis for selection. A suggested framework is as follows: a. Definition of techniques. b. Characteristics of techniques. c. Characteristics of the group, audience, or speaker. d. Goals and objectives of meeting or group. Develops a problematic situation and guides class in its resolution.	Develops a framework. Analyzes each technique according to framework. Resolves problematic situation. Provides and analyzes situations from own experience. Observes other groups in session.	3,4,5

<u>Learning experiences</u>	<u>What the teacher does</u>	<u>What the student does</u>	<u>No. of objectives</u>
9. Systematic on-the-job evaluation.	Suggests people on campus and in home State who are doing evaluation. Suggests student keep bibliography up to date. Informs students about national and regional laboratories on group development. Informs students about professional organizations, such as Adult Education Association.	Talks with people doing evaluation. Interviews people. Counsels with people. Observes group method evaluation. Reads reports of laboratories. Reads in professional journals.	5

IV. Evaluating Group Development in Extension Work

Possibilities:

1. Advance of registration: send letter and questionnaire to students expected to enroll in course, interests and problems, materials to bring.
2. Analysis and discussion of interest and problems in relation to course objectives.
3. Observation of student behavior - questions raised, illustrations given, concepts used in class.
4. A formal device to measure progress in relation to objectives.
5. Self-evaluation by student in use of concepts and techniques.
6. Terminal, questionnaire, same commitment to apply what learned on the job or examination.
7. Same continuing evaluation after returning to job.

Repeat Number 1 to get idea of changes in understanding and use of course content. We recognize the need to cooperate with administrators and supervisors in the States in which students work in the continuing job of evaluating the performance of students' work on the job.

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DEVELOPMENT OF EXTENSION PROGRAMS

Group Members:

P. K. Connelly, Indiana
Group Leader
J. Paul Leagans, New York

J. L. Matthews, USDA
J. W. Scheel, Oregon

I. Objectives of the Course

To help students to:

- *1. Appreciate the importance of developing a sound program.
- *2. Know and understand the basic principles of program development.
- *3. Know and apply program development procedures based on sound principles.
- *4. Understand how broad objectives can provide opportunities for integration of programs and coordination of effort.
5. Know and understand the meaning of a list of commonly used program development terms.
6. Develop an appreciation of the importance of clear objectives.
7. Appreciate the program development process as an educational experience in itself.
8. Become acquainted with and use helpful materials and references in program development.
9. Stimulate interest in improved program development in their home States.
10. Appreciate the value of a written program as a work guide and a basis for evaluation.

*These are the major outcomes expected from the course. It will be attempted to attain the other objectives by the way in which learning experiences for these are developed with the students.

II. Content of the Course

The course content is not listed in order of appearance or importance. It will be organized in sequence in the course outline.

A. Terms to be defined:

Program	Problems	Farm and home unit
Program of work	Background facts	approach
Plan of work	Program planning	Extension organization
Project	Program determination	Planning committee
Project planning	Program development	Advisory committee
Objective	Program projection	Community
Goal	Integration	Procedure
Situation	Coordination	Evaluation

B. Principles of Sound Program Development

1. Program planning determines objectives.
2. Objectives grow out of the local, State, national, and world situation.
3. The people participate in program development, both as members of groups and as individuals.
4. Program development is a continuous educational process.
5. Program development begins and ends with evaluation.
6. Definite organizing procedures are necessary.
7. Integrated programs require the joint participation at the county level of lay people, appropriate subject matter authorities, and extension workers.
8. Program planning helps people learn to solve their own problems.
9. Helping to plan a program stimulates people to help carry it out.
10. Program content is based on decisions of the people.
11. Programs are based on interests and recognized needs of the people.
12. Integrated programs have the greatest educational impact.
13. One effective way to work with people is through existing organizations and this possibility should be investigated before setting up any new organizations.
14. Representative individuals not members of any organized group are involved.
15. Programs are dynamic in terms of providing for progressive learning and enlisting additional learners.
16. Long range programs are prerequisite to sound annual plans of work and effective teaching.

C. Criteria for Sound Programs

1. Long range - the basis for several years work.
2. Based on a thorough analysis of facts about the current social and economic situation, including pertinent national and international as well as local data.
3. Extensive participation by the people in the processes of developing the program.
4. A continuous process involving frequent reappraisal of outcome.
5. Program emphasis based on an agreed upon priority of the major problem.
6. Clearly stated objectives for solving those problems.
7. A definite plan of action for reaching the program objectives.
8. Evaluation as an integral part of plans and procedures.

D. Clearly stated objectives.

E. Program objectives determined after considering many sources of suggestions.

F. Provides for evaluation in terms of objectives.

G. Sound procedures were followed.

III. Learning Experiences to be Provided

Listed below are some of the possible learning experiences which may be created to help reach the objectives. They will be amplified by use of many devices and techniques to make them as meaningful as possible to the students. They are not listed in particular order of use but the numbers in the right hand column indicate the objectives toward which the learning experiences are directed.

	<u>Number of the objectives</u>
A. <u>Lecture and Discussion</u>	
Criteria of a sound program.	
Proof from extension and other sources of the importance of a sound program.	All objectives
Principles of program development---examples to explain the "Why."	
Examination of different views.	
Repeated emphasis of principles.	
Meaning of terms used in course.	
Repeated use and reference to meanings.	
Present status of program development in the United States.	
The farm and home unit approach.	
Program projection.	
B. <u>Student Analysis and Discussion</u>	1, 2, 3, 4, 6, 7, 9
County case studies of program development.	
Sample programs.	
Students' own programs.	
Students' experiences in program development.	
Examples of plans of work.	
C. <u>Student Reading</u>	2, 6, 7 8, 9, 10
Selected applicable publishing materials.	
Selected specially duplicated materials.	
D. <u>Student Reportings, Written Assignments, Examinations</u>	All objectives
Exams to be written out of class.	
Short quizzes on reading and important concepts.	
Individual and group oral class reports on:	
Their own experiences and program procedures.	
Definition of terms.	
Critiques of sample programs and case reports.	
Reading assignments.	

E. Lecture, Discussion, and Practice Content

All objectives

Criteria for satisfactory objectives.
Sources of desirable objectives.
Stating extension objectives.
Selecting objectives.
Inferring extension learning experiences from objectives.
Proof from research of the importance of clear objectives.
Levels of objectives.
Example of how all lines of work come together in broad objectives.
Student practices in writing objectives.
Reinforcement value of multiple approaches.
Integration and coordination through objectives.

IV. Course Outline

Session

Numbers

- 1 Introduction to the Course; and Objectives of the Cooperative Extension Service.
- 2-3 Organizational Pattern of the Cooperative Extension Service.
 - a. Basic principles.
 - b. Organization and functions of the Federal Extension Service.
 - c. Organization and functions of State Extension Services.
- 4 Characteristics of desirable programs.
- 4 a. Definitions of extension and program development terms.
- 5-6 b. Wide participation by the people is essential.
- 7 c. People must understand and want program.
- 8 d. Based on existing cultural situations.
- 8 e. Deals with major problems or objectives.
- 8 f. Kept up to date.
- 9 Processes of program development.
- 9 a. What part the State office, the county staff, and the people play.
- 10 b. Steps or jobs to be done.
- 11 c. Determining possible objectives.
- 12 d. Deciding on program objectives and
- 13 Writing the program and the plan of work.
- 14 Program execution.
- 15 Program reporting and evaluation;
summary and review.

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DEVELOPMENT OF 4-H CLUB WORK

Group Members:

Robert Clark, Wisconsin

R. O. Monosmith, California

Ben D. Cook, Texas

Group Leader

Mylo Downey, USDA

Julius O'Quin, Louisiana

Lloyd L. Rutledge, USDA

Aim, Objectives, and Scope of Course in the Development of 4-H Club Work.

I. Aim

To so teach extension workers that they increase their desire, knowledge, and ability to help themselves and other adults, so that they can provide maximum opportunities for young people to develop as happy, responsible, participating individuals.

The following objectives for this course were developed in view of the trends that are affecting 4-H Club work.

II. Objectives

To help students understand:

1. That 4-H Club work is an integral part of the total extension program.
2. The basic purposes and principles in 4-H Club work.
3. The knowledge and skills needed in developing programs for youth based upon the developmental needs of youth and the adults working with them.
4. How to recognize, analyze, and develop solutions and evaluate results on problems of importance to him and to the program.
5. The value and use of educational materials that will enable them to become more effective extension workers.
6. The historical background of 4-H Club work and recognize the social and economic trends as they affect youth and the 4-H program.
7. The importance and methods of keeping cooperating groups and the general public informed about the 4-H Club program.

III. Scope of this course

The major emphasis will be on principles, procedures, and research findings which should assist students in solving their own problems.

IV. Course Outline

Course content	Learning experience	Objective	Class sessions
A. Introduction			
1. Objectives of course	Lecture and discussion	I	1
2. Class arrangement	Small - groups	II	
3. Methods to be employed		VI	
4. Define - problems	Selected reading -		
Development of 4-H Club work	Assignments		
B. The Situation			
Trends in 4-H Club work	Lecture	I	
Tenure, reenrollment, completions, analysis of population and census.	Case study of own county and State	IV	2
New development in extension programs--Farm and Home Development.		V	
Finding, interpreting and using facts.	Lecture Panel Discussion	VI	3
C. The People			
(a) Objectives of 4-H Club work at level of members, leaders, parents, extension staff.	Committee approach, role playing, panel - discussion	II III IV V	4
(b) Basic needs of youth a. younger member b. older member	Lecture and discussion, assigned reading, role playing	VII	5
(c) Factors affecting the participation by 4-H members - How to meet the problem.	Assigned readings, research, findings, lecture, discussion		6
(d) Adult and junior volunteer leaders in the 4-H Club Program - selection, training and motivation.	Committee approach, assigned readings, discussion (small group) lecture, committee reports		7-8
(e) Parent Cooperation	Lecture, assigned reading, committee reports, discussion,		9
(f) Cooperation of supporting organizations - national committee, foundations, community resources, relationship with other youth organizations.	readings, lecture, discussion, committee reports		

Course content	Learning experiences	Objectives	Class sessions
D. Program Development Tools and Methods		I II III	11-12 13-14
(a) Principles of planning local and county 4-H program	Case studies and reports, lecture, group discussion	IV V VII	
(b) Motivating 4-H members through awards and recognition.	Discussion (small groups), lecture, reading assignments		
(c) Objectives of projects and records.	Lecture		
(d) Use of activities and events and citizenship development.	Committee reports, discussion		
(e) Use of teaching methods, demonstrations and judging.	Lecture, discussion		
E. Summary and Evaluation	Final examination evaluation form		15
V. Grading and Evaluation			
A. Grades			
1. Discuss and plan early in class.			
2. Consider requirements of school.			
3. Ways.			
a. Final examination.			
b. Individual report on a problem.			
c. Observation grade by instructor.			
d. Personal interview.			
e. Participation grade.			
f. Consider using a pretest for and with students.			
B. Evaluation of Course			
1. Use an opinion reaction by students. This is to be arranged by instructor and class.			
2. An effort be made in testing effect by objectives of course in growth of students.			

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PRINCIPLES AND TECHNIQUES IN EXTENSION TEACHING

Group Members:

Alice Linn, USDA

H. J. Putnam, Mississippi

F. E. Rogers, Missouri

F. S. Sloan, North Carolina,
Group Leader

Gale Vandenberg, Wisconsin

K. F. Warner, USDA

The committee believes this course should be offered annually at each of the regional schools.

The major purpose of this course is to increase the teaching effectiveness of the student.

I. Objectives

To help the students:

1. Develop a clear concept of what is involved in their role as teachers.
2. Gain skill in determining and stating teaching objectives.
3. Understand basic principles of teaching.
4. Understand the factors involved in the selection, combination, and sequence of appropriate teaching methods.
5. Increase their knowledge of available resources, both human and material, and to appreciate the importance of their use in effective extension teaching.
6. Gain an appreciation of the importance of detailed teaching plans to effective extension work.

II. Learning Experiences

For Objective Number 1: "To help the student develop a clear concept of what is involved in his role as a teacher," have the students:

1. Discuss their present mode of operation in meeting problems encountered in conducting the extension program.
2. Read and discuss the general objectives of extension.
3. Discuss and evaluate concepts of various educators as related to extension teaching.
4. Give their concepts of the responsibility of the extension agent as a teacher.
5. Develop, through group discussions, a concept of the teaching role.

For Objective Number 2: "To help the students gain skill in determining and stating teaching objectives," have students:

1. Acquire the facts necessary to determine teaching objectives.
2. Work out their own teaching objectives in varied situations.
3. Evaluate the teaching objectives of other students.

For Objective Number 3: "To help the student understand basic principles of teaching," have students:

1. Observe a demonstration involving some of the basic principles of teaching.
2. Read selected references by recognized authorities and discuss the principles in class.
3. Relate from their own experiences some teaching principles involved in a given situation.

For Objective Number 4: "To help the students understand the factors involved in the selection, combination, and sequence of appropriate teaching methods," have students:

1. Identify and discuss teaching methods they have used.
2. Observe an illustrated lecture on, and participate in a discussion of teaching methods and the factors influencing the selection of methods for a teaching plan.
3. Work in small groups to select methods, recommend sequence, and justify their selection and sequence in relation to an assigned teaching objective in a given situation.

For Objective Number 5: "To help the students increase their knowledge of available resources, both human and material, and to appreciate the importance of their use in effective extension teaching," have students:

1. Participate in identifying major resource areas.
2. List the specific human and material resources within the major resource areas identified.
3. Participate in discussions relating to securing and using potential resources in conducting their county programs.

For Objective Number 6: "To help the students gain an appreciation of the importance of detailed teaching plans to effective extension work," have students:

1. Share in a discussion of the general organization and content of a good teaching plan.
2. Hear experiences of some person who has successfully used extension teaching plans.
3. Study and discuss some teaching plans that have been used and examine the conditions under which they were used.
4. Develop a teaching plan for a phase of his county extension program.

III. Topical Outline

1. What is education, teaching, learning?
2. The Cooperative Extension Service as an educational agency.
 - a. Purpose and objectives.
 - b. The function or role of the extension worker.

3. Selection, analysis, and statement of extension teaching objectives.
 - a. What are objectives? (nature and function)
 - b. What are the sources of objectives?
 - c. How are objectives determined?
 - d. Kinds of objectives that may be aimed at in extension teaching.
 - e. Determining and stating teaching objectives to be used as a guide in arranging learning experiences.
4. A. What are basic principles of teaching?
 - a. Definition and examination of basic teaching principles.
 - b. The function of basic teaching principles in effective extension teaching.
 B. The nature of learning experiences and learning situations.
 - a. The process of learning.
 - b. Characteristics of learning experiences.
 - c. Characteristics of an effective learning situation.
 - d. The function of the teacher in providing learning experiences.
5. Selection and use of extension teaching methods in setting up learning situations.
 - a. Function and characteristics of methods.
 - b. Factors to be considered in selection, combination, and sequence of methods.
 - c. The application of methods in extension teaching.
6. The place of a detailed teaching plan in the extension teaching process.
 - a. Definition, organization, and content of a teaching plan.
 - b. Function of a teaching plan in extension teaching.
 - c. Resources available in carrying out a teaching objective.
 - (1) Type, availability, and location.
 - (2) How available resources can contribute to effective extension teaching.

IV. Evaluation

- A. Evaluate progress of students within the course content as follows:
 1. Early in the course obtain from students statements of their problems and needs in relation to extension teaching.
 2. Observation of students' attitudes through day to day participation in groups and individually.
 3. Near the end of the course have students: (a) give their concepts of their responsibilities as extension teachers; (b) each develop a teaching plan for a phase of his program incorporating the principles, objectives, and procedures learned.
 4. Offer to review any teaching plan they may work out later for use in their work.
 5. After the course, write each State director for comments on any effects this course had on the students.

B. Evaluate the methods used and the course content in relation to meeting the needs of the students as follows:

Through means of an unsigned questionnaire obtain from each student his reaction to:

- a. Course content in relation to needs of student.
- b. Methods and techniques of presentation.
- c. Emphasis placed on various phases of the course.

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FARM AND HOME DEVELOPMENT

Group Members:

Ruth Deacon, New York

R. S. Smith, New York

N. S. Hadley, Indiana, Group Leader

Objectives

As we visualize it, our task is to design a course that will provide the training needed by extension workers if they are to do effective farm and home development work in any State, regardless of how the work is organized.

The essence of farm and home development is that it:

1. Starts with the family, its resources and its goals (however little or much the goals are discussed as such).
2. Helps them explore the possibilities that are open to them as a family.
3. Teaches them concepts and principles and provides them with the information they need to make the most of their situations.
4. Works out methods and tools that help them evaluate their alternatives and make their choices in terms of their goals.
5. Gives them assistance in carrying out their decisions and appraising their progress.

This concept of farm and home development is consistent with the traditional function of extension--to help people help themselves--and is opposed to the idea of making decisions for them. Increasingly, in modern rural life, families are being confronted with individual problems which require such an approach if education is to be fully helpful in their solutions.

We have described our concept of the essentials of farm and home development, regardless of how it is organized and conducted or by what name it is called. Based on this concept, the following are the objectives of the course itself:

- A. To help the student (extension worker) better understand:
 - (1) The nature of farm and home development as an extension approach and the sequence of steps involved in it.
 - (2) What it can do for the farm family and how the family uses it.
 - (3) How it can be interrelated as a part of the county extension program.
- B. To help the student understand and use the concepts, principles and facts that are needed in farm and home development.
- C. To familiarize the student with appropriate methods and tools for teaching facts, concepts, principles, and relationships which will help farm families evaluate their alternatives and make their choices in terms of their goals.

- D. To help provide appropriate assistance to farm families in carrying out the decisions they make.
- E. Encourage the student toward further study in farm and home development.

Course Content

The course content here outlined is intended for instructors. Since there will be variations in: (a) instructor experiences, (b) composition of the classes, and (c) types of farming areas represented, this outline for the course provides for some degree of choice. The order of sequence may be varied.

I. Introduction

- A. The reasons for having this course.
- B. The plan for this course. Objectives, procedures, etc.
- C. How families have been helped with farm and home development.
 - 1. Case histories.
 - 2. Project reports.
 - 3. State experiences.
- D. National viewpoints on usefulness.
- E. FHD and the whole extension program. (Developments over many years in managerial theory provide a firm base for the extension undertaking in farm and home development.)
- F. Interdependence of the farm and the household.
- G. The family unit approach.
- H. Inventorying student experiences and training.
- I. A philosophy for adult education.

II. Economic Principles Useful to Workers in Farm and Home Development

Because of time limitations, it is impractical to cover all of the following principles in any one three-weeks' course. These basic concepts and principles can be taught through application to situations familiar to the student. Since conditions in different areas vary widely, the choice of principles to be given emphasis and the situations in which they are illustrated will need to vary.

- A. Principles of management.
 - 1. What management is, how managerial ability is developed, association with learning, risk taking, security seeking, strategies.
 - 2. Application to family and individual goals, thence to farm business and to the household.
- B. Resource allocation (abilities, skill, land, working capital, etc.).
 - 1. Equating returns from resources over time.
 - 2. Static economic principles and concepts that should be illustrated and defined where appropriate in the course:
 - a. Fixed and variable assets--opportunity cost and replacement cost.
 - b. The law of diminishing returns.
 - c. One variable input or group of inputs--most profitable level of input.

- d. Two or more variable inputs or groups of inputs.
 - (1) Input complementarity and substitutability.
 - (2) Least cost combinations.
 - (3) High profit point.
- e. Enterprise combinations.
 - (1) Complementarity--real byproduct, and as a result of need to more fully use certain resources.
 - (2) Competitiveness--optimum combinations of enterprises and most profitable scale of operations.
- f. The law of diminishing utility--optimum expenditure patterns.
- g. Cost Concepts.
 - (1) Total cost.
 - (2) Average total cost.
 - (3) Fixed cost.
 - (4) Average fixed cost.
 - (5) Total variable cost.
 - (6) Average variable cost.
 - (7) Marginal cost.
- 3. Approaches to organization:
 - a. Primary purpose in farming for the family (goals, interest in commercial, part-time farming, etc.).
 - b. Factors that limit organizational and income possibilities.
 - (1) Land.
 - (2) Labor.
 - (3) Capital.
 - (4) Management ability.
 - (5) Location (markets and services).
 - (6) Personal preferences.
 - (7) General economic situation.
 - (8) Regulatory programs.
 - (9) Family situations.
- C. Budgeting as a tool in approaching organization.
 - 1. Income and capital budget.
 - 2. Consumption and investment budget.

III. How to Help Families with Farm and Home Development

- A. Appraise requirements for self-improvement.
 - 1. An analysis of the family choices.
 - 2. An examination of (a) existing wants, values, preferences, needs, goals, or family objectives and living standards, and (b) desired changes therein (motivation, study, self-management).
- 3. Inventorying resources.
 - a. Human and intangible.
 - b. Physical.
 - c. Financial. d. Community.
- 4. Evaluation of returns to the family expected from certain sets of resources.
- 5. Reconciliation of what is desired by the family with resources and income.

- B. Develop alternative plans based on individual and family goals.
 - 1. The Farm Plan.
 - a. Farm layout (buildings and improvements).
 - b. The crop program.
 - c. Soil improvement program.
 - d. The livestock program.
 - e. Requirements date.
 - f. Water management.
 - g. Enterprise scope and combination.
 - 2. Home Plans.
 - a. The food program.
 - b. Housing and household operation.
 - c. The clothing program.
 - d. Education.
 - e. Recreation and relaxation.
 - f. Community.
 - g. Savings.
 - h. Protection against risk.
 - i. Other.
- C. Select the final plan by integrating farm and home alternatives and assessing short and long time consequences of the various choices.
- D. Follow up activities.
 - 1. Train families on practices, record keeping, analysis, consumption and investment, etc.
 - 2. Help community facilities, such as soil testing, farm engineering, etc.
 - 3. Put in touch with services needed (credit, marketing, professional, etc.).
 - 4. Provide family with other information needed.

IV. Considerations in Setting up a County Program in Farm and Home Development.

- A. Analyze the present farming and family living conditions in the county.
- B. Analyze the present county extension program carefully.
 - 1. Farm and home development takes time.
 - 2. Review whether it can help get some of present work done more effectively.
 - 3. Review whether it can replace some of present activities—such as method and result demonstrations.
- C. Get support and sanction of county sponsoring organization to initiate the program in the county.
- D. Develop a plan appropriate to your county situation.
 - 1. Get support of leaders.
 - 2. Enlist cooperation of appropriate agencies.

Learning Situations

In teaching this course, it is suggested that insofar as is practicable learning situations and teaching methods be selected which would be appropriate in teaching farm families; that to a degree this course be a demonstration.

In a general way, it is suggested that principles be taught by application to situations familiar to the students, and that the concepts and principles be taught in simple, easily understood terms.

It is further suggested that the following list be considered a core around which the teacher can construct the sequence of learning experiences which will most effectively attain the objectives set forth.

Learning situations

1. Describe and discuss the history, philosophy and growth of the farm and home development work.
2. Present and discuss factual data based on farm record analysis, input-output studies, family living studies, etc.
3. Provide and demonstrate the use of appropriate forms to inventory resources.
4. Provide and demonstrate tools and standards and give opportunity for experience in their use.
5. Provide and demonstrate simple budgeting procedures.
6. Acquaint the students with family situations (farm visits or case studies).
7. Discuss ways the student can provide learning situations for the farm family.

Objectives for student

- To stimulate interest on the part of the student in this work and to help the student understand the purpose and scope of the course.
- To understand situations and principles which relate to:
- Efficiencies in the use of basic resources.
 - Family living expenditures.
 - Influence of rate of output on unit costs of production.
 - Practices in household management.
 - Choices of enterprises as a basis for balancing resources.
 - Influence of prices and price relationships.
 - Etc.
- To learn how to help the family inventory resources and present practices as a basis for appraising opportunities.
- To learn how to help farm families measure and appraise opportunities in terms of alternative courses of action.
- To learn how to compare the results of alternative courses of action available to a family.
- To learn how to use tools, forms, work sheets, budget forms, and standards in actual situations.
- To encourage the understanding and use of the process described in steps 1 to 5 by farm families. As a result of this process, it is expected that the family will select a course of action in line with its goals (which are influenced by non-economic as well as economic considerations).

Learning situations

8. Discuss ways and means by which the student can give further information and assistance to the family.
9. Review approaches made by different counties and States through the exchange of experiences of class members, the teacher, and other experienced persons.

Objectives for student

- To learn how to implement the development of the course of action which the family selects to make the most effective use of available resources in approaching family goals.
- To become familiar with various approaches that are being used in order to develop an effective county program.

Course Evaluation

Some evaluation techniques which might be used are:

1. Discuss scope and content with the class at first opportunity, in order to direct the course toward the needs of the students.
2. Use periodic testing to check progress of students toward stated course objectives.
3. Provide opportunities for individual counseling with students to evaluate individual progress (and give guidance).
4. Provide opportunity for students to develop and compare alternative plans for individual farm family situations in order to measure progress of students in the use of methods and tools (as well as to provide effective learning situations).
5. Give final examination to evaluate extent to which objectives were attained with:
 - a. Class as a unit.
 - b. Individual class members.
6. Consider use of evaluation check sheet:
 - a. At final class session.
 - b. At some time subsequent to course conclusion in order to get student opinions of effectiveness of teaching methods used in attaining objectives stated.
- V. Detailed reference materials for a farm and home development course are in the Report of the First Workshop on Extension Regional Summer Schools, Purdue University, September 27, 1954. Copies are available through the Division of Extension Research and Training, Federal Extension Service, Washington 25, D. C.

MASS COMMUNICATIONS

Group Members:

Marjorie B. Arbour, Louisiana
J. W. Scheel, Oregon

John N. Spaven, Vermont
M. E. White, Wisconsin,
group leader

I. Objectives

- A. To help extension workers develop a clearer understanding of the values, principles, and methods of communications.
- B. To improve the abilities and skills of extension personnel in applying these principles and methods to inform and teach people more effectively.
- C. To develop within the student an awareness of his personal stake in better communications in terms of prestige, satisfaction, efficiency, and security.
- D. To develop an awareness of the philosophy of agricultural extension and how it relates to all aspects of the communications program.

II. Basic Concept

The course should be based on a coordinated and balanced program which makes use of all or a combination of existing potential mass communications methods.

III. Major Areas of Emphasis

The communications committee recommends that the course be confined to mass media. This includes newspapers, magazines, radio, television, audio-visual aids, direct mail, and publications.

Recognizing the need for an analysis of ways of improving the techniques of presenting demonstrations and of conducting meetings, tours, demonstrations, farm and home visits, and other events, the committee further recommends the establishment of a second course in communications to cover these areas.

IV. Proposed Course Outline

- A. Relating the principles of communications to the philosophy and objectives of the extension service.
- B. Applying the principles of motivation in the use of communications.
- C. Determining the impact of extension's use of communications channels.
- D. Exploring the channels of communications available to extension personnel.
 - 1. Identifying the channels of communications.
 - 2. Creating an understanding of the directions of the flow of information among researchers, specialists, agents, allied organizations, agencies and industries, and media personnel and to the audiences.
 - 3. Stimulating and implementing the flow of information both inside and outside the extension service.

- E. Understanding the characteristics and methods of operation of commercial media.
 - 1. Competitive nature of industry.
 - 2. Methods of operation.
 - 3. Ways of establishing cooperative relationships.
- F. Coordinating and integrating communications with the total extension program.
- G. Improving communications techniques.
 - 1. Writing.
 - 2. Speaking.
 - 3. Visualizing.
- H. Learning experiences.
 - 1. Practice.
 - 2. Production.
 - 3. Discussion.
 - 4. Analysis.
 - 5. Group problem solving.
 - 6. Reference reading.
- I. Evaluating course.
 - 1. By students.
 - a. Regional school evaluation sheet.
 - b. Course evaluation sheet.
 - 2. By instructor.
 - a. Classroom work.
 - b. Examination.
 - c. Final projects.
 - d. Supervisor's evaluation sheet (enlist cooperation of supervisors in past school evaluation of the students' work on the job to determine achievement of objectives A, C, and D).

V. Some Effective Teaching Aids

A. Newspaper operations and newswriting.

Movies: "Good Neighbors" 20 minutes
Minneapolis Tribune, Minneapolis, Minnesota

"From Trees to Tribunes"
The Chicago Tribune, Chicago, Illinois

These two movies are good presentations of the whole process of newspaper production.

Other materials: Copies of newspapers; clippings of columns and special articles, engravings, mats and type.

B. Radio broadcasting:

Movie: "Radio Broadcasting Today" 20 minutes
National Broadcasting Company, New York

Other materials: Samples of scripts; tape recordings which illustrate the whole range of radio formats for farm, home, and 4-H broadcasts. Magazine: "Broadcasting and Telecasting".

C. Television.

Movies: "NBC Story of TV" 30 minutes
National Broadcasting Co., New York

"How Television Works" - NPAC training film
National Project in Agricultural Communications,
Michigan State University, East Lansing, Michigan

Other materials: USDA Packaged TV Program, Washington, D. C.
State Sources: kinescopes, films, slides, and publications.

D. Audio-visual aids.

Slides and filmstrips: "How to Use Visual Aids"
Purdue University, Lafayette, Indiana

Exhibit Ideas, Extension Service,
USDA, Washington, D. C.

Foto Facts, Cornell University,
Extension Editor, Ithaca, New York

Farm Photography, Extension Service,
USDA, Washington, D. C.

E. Direct mail.

Slidefilm: "Circular Letters," Extension Service, USDA.,
Washington, D. C.

F. Tools for use in course.

Motion picture projector
Slide Projectors
Tape recorder

Flannel board
Blackboard
35 mm. camera

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